上海英界仁記路第五號

THE FAR EASTERN REVIEW

Engineering
Finance ❋ Commerce

遠東時報

Vol. XI., No. 1. ❋ SHANGHAI—MANILA ❋ June, 1914.

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MR. LIANG TUN-YEN, Minister of Communications.

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THE FAR EASTERN REVIEW

COMMERCE :-: ENGINEERING :-: FINANCE

VOL. XI. SHANGHAI AND MANILA, JUNE, 1914 No. 1

THE TRAMWAYS OF SHANGHAI

DESCRIPTIONS OF THE THREE SERVICES

Shanghai with its three services, British, French and Chinese, is now very adequately supplied with trams. The total length, on a single track basis, is over forty miles. The motors and cars are thoroughly up to date, and shortly railless cars are to make their appearance in the International Settlement.

Following are articles describing the three systems.

THE SHANGHAI ELECTRIC CONSTRUCTION CO., LTD.

The present-day visitor to Shanghai finds it difficult to realize that only six years ago there were no trams in the Foreign Settlement. The trams are to-day such a dominating feature of street traffic that to visualize the city without its standards and overhead wires, its cars and its trailers, is no easy task. In 1913, the trams carried 47,686,648 passengers and it is estimated that the total for 1914 will be about 60 millions. What did all these people do in the tramless days of the past? Evidently the trams came none too soon. As far as appearances go the ricksha puller and the wheelbarrow coolie still find ample employment. It is evident, however, that the coming of the trams put a check on the further development of the manually drawn vehicle. An indication of this is found in the fact that, whilst the number of public rickshas licensed increased 55% between 1903 and 1907, the average number per annum for the following six years (the trams started in 1908) was less than the number in 1907. The number of private rickshas has been somewhat reduced since 1907. Had both public and private rickshas gone on increasing in number at the rate they had been doing before the trams started, many of the streets would no doubt have been congested by this time to a degree that would have rendered them well-nigh impassable. In all large cities, it has been found that the larger the volume of traffic to be carried the larger and faster must be the units employed for conveyance. Thus, from single-passenger vehicles there is the step in the evolution of the means of Passenger Transit to vehicles such as tramcars or omnibuses; and where the traffic is so dense that such means are inadequate unaided, Underground or Overhead Railways have to be resorted to, with long trains travelling at an average speed much in excess of that which is possible for street vehicles. The increase in the number of motor cars in Shanghai is more or less offset by a reduction in the number of carriages.

Looking back it is quite easy to understand that the want of trams was not felt in the very early days. Then the foreign population of Shanghai was comparatively small, and the Chinese residents of the Settlements a negligible quantity. But, as the number of foreign residents increased and the influx of Chinese that began with the Taiping rebellion continued and augmented, it became necessary for the city to spread. Residences sprang up in localities far removed from the business centre, and although the wealthy had their private conveyances, and the ricksha and the wheelbarrow were at the disposal of those less well-off, the need for mechanical traction began to be evident. After discussion of the matter for a number of years, it was decided by the Ratepayers that offers should be invited for a system of Electric Tramways. This was done, and in October, 1905, Messrs. Bruce, Peebles and Co., Ltd., of Edinburgh were granted a concession to construct and operate Electric Tramways in the Foreign Settlement. The construction work was carried out by this firm. The concession was transferred to the Shanghai Electric Construction Co., Ltd., which Company owns and operates the system.

It was specified that the track should be of meter guage; that grooved girder pattern rails weighing 90 pounds per yard should be laid upon a concrete bed 6 inches thick, and that the roadway between the rails and for 18 inches on each side of the outer rails should be paved and maintained in repair by the Company. A royalty of 5 per cent. on the gross receipts of the Company is also payable to the Council. The Company has to pay municipal taxes on all its buildings. It was required to contribute £7,500 towards the cost of the present Garden Bridge and North Chekiang Road Bridge.

The concession further stipulated that the Company should take its electric current from the Council's electric station; and that, if the Council should decide at any time during the continuance of the agreement to allow the Company to generate its own current, the Company should purchase the Council's traction power plant, at cost price, less 7½ per cent. annual depreciation. It was also provided that, should the Company sell its tramway lines, or the Council its electricity undertaking, the purchaser in either case must be a British Company or person.

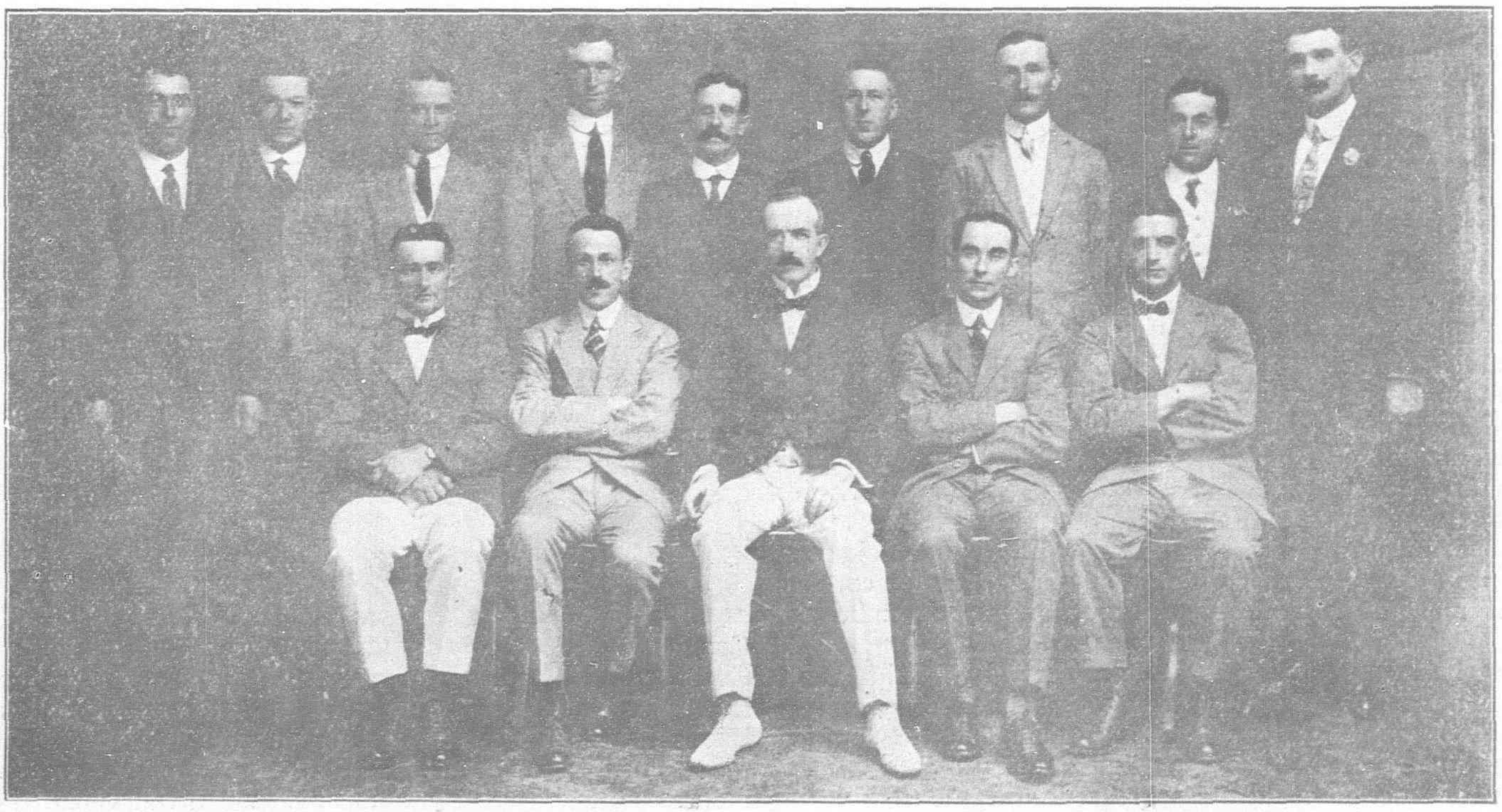
COST OF POWER.

By a supplementary agreement of the same date the Company contracted to purchase power for its lines from the Council, which was already operating a power plant for electric lighting. Direct current at 500/550 volts was specified and 600 kilowatts was fixed as the maximum power to be required; but the Council agreed to increase this maximum supply upon 12 months' notice from the Company. By arrangement, plant for a maximum demand of 900 kilowatts was installed before the opening of the Tramways. Rates for power were fixed, with the provision that a revision of rates should be made at the end of every five years, the revised rates to be based upon a comparison of the original estimated cost of generating power with the actual cost at the time of the revision. The inclusive rates

Sir Alfred Dent, K.C.M.G.
Chairman of the Shanghai Electric Construction Co., Ltd.

Mr. Edward Wheeley, Chairman of the Local Board
of the Shanghai Electric Construction Co., Ltd.

fixed per unit, with a minimum annual consumption of 1,250,000 units, were as follows: First 600,000 units, 4.8 tael cents; second 600,000 units, 4.6 tael cents; third 600,000 units, 4. 4 tael cents. These initial rates were based upon an estimated production cost of 3.28 tael cents per unit, but it was found, during the second year that the line was in operation, that, owing to the consumption having greatly exceeded the estimated amount upon which this scale was based without the maximum of 900 kilowatts being exceeded, the initial rates were too high. The Council, therefore upon application by the Company, agreed

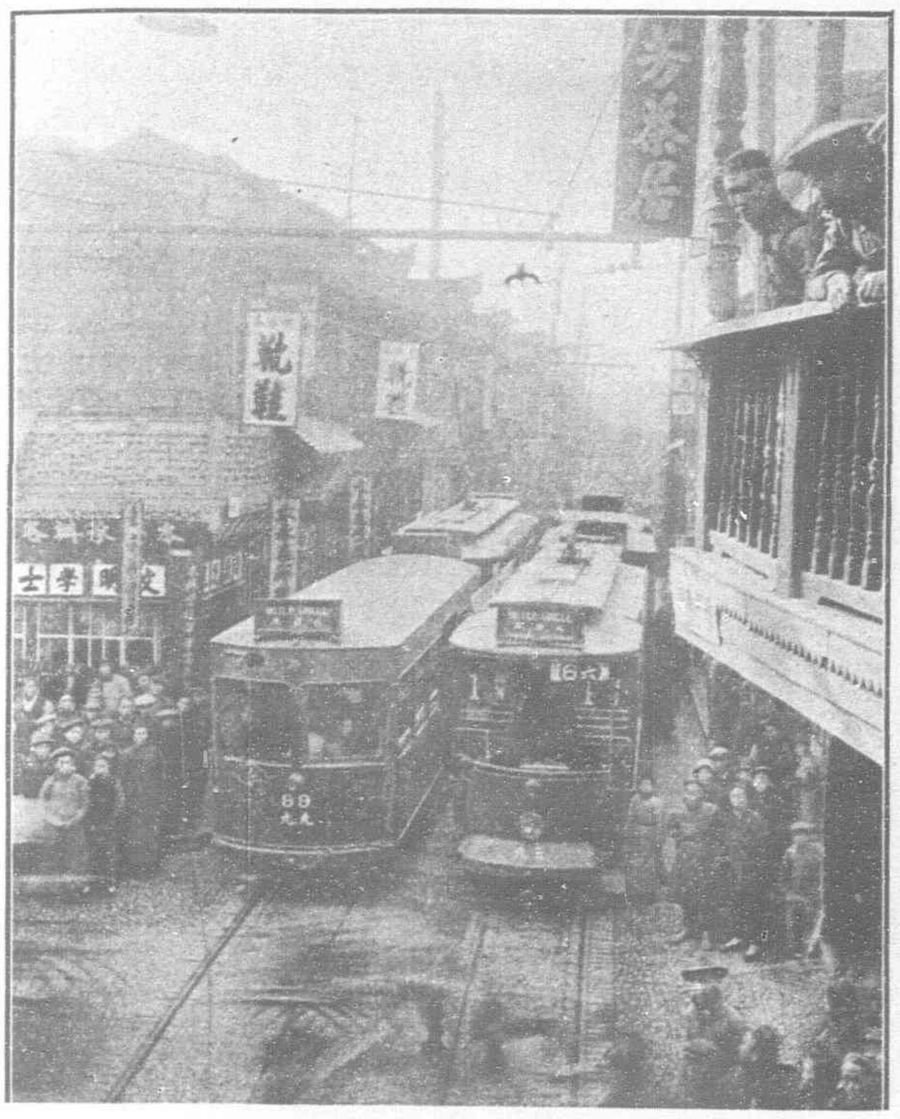


Some of the European Officials of the Shanghai Electric Construction Co., Ltd.

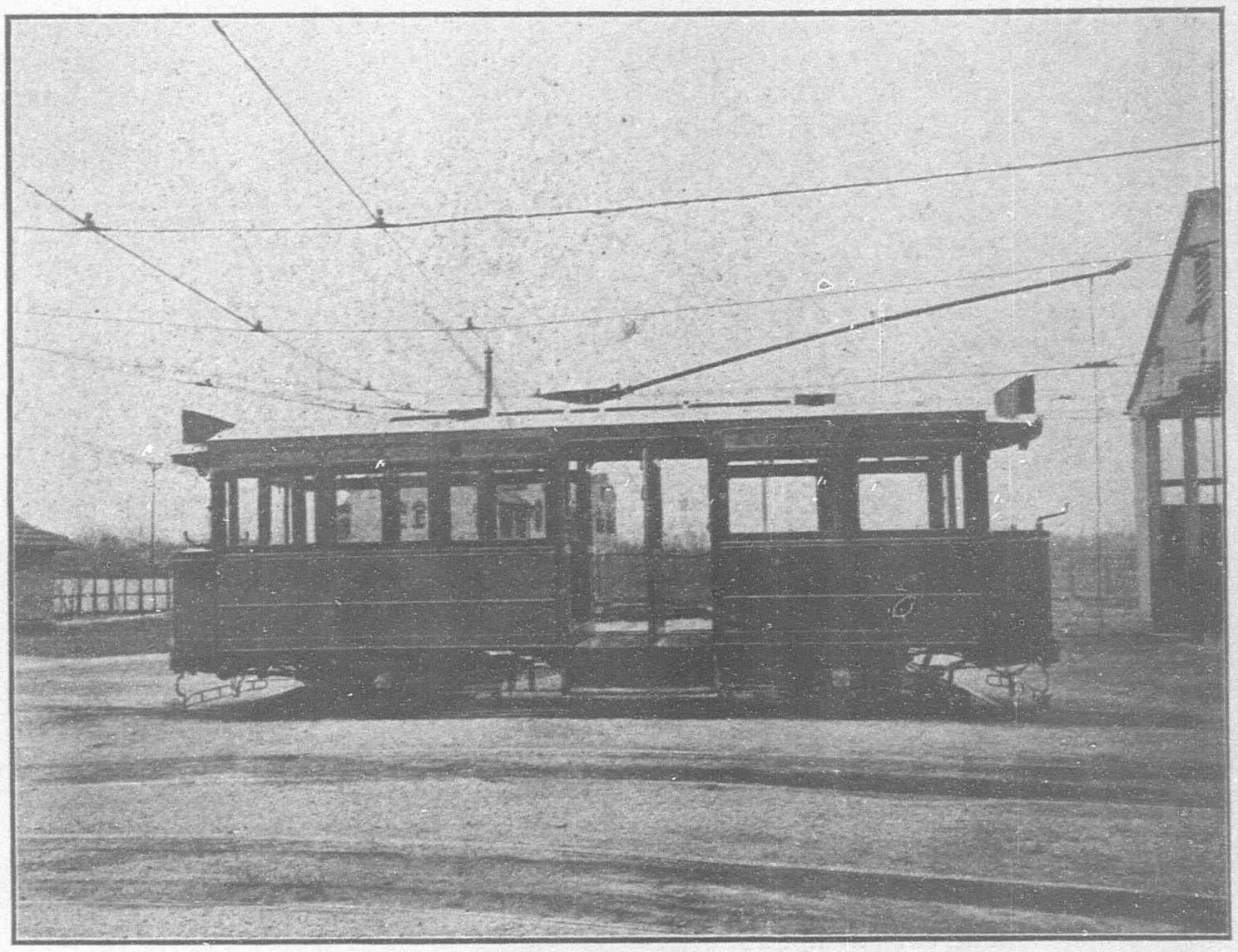
From left to right

Sitting:—Mr. H. J. Blatchford, Mr. J. G. Smeaton, Mr. D. McColl (General Manager), Mr. E. Carroll, Mr. J. L. Gordon.

Standing:—Mr. A. W. McLean, Mr. C. F. Taylor, Mr. G. Pollock, Mr. T. H. Brownlie, Mr. W. Doran, Mr. H. G. Sadler, Mr. S. Marks, Mr. J. H. Watling, Mr. P. Cassidy.



Foreign Settlement Trams.—Canton Road.

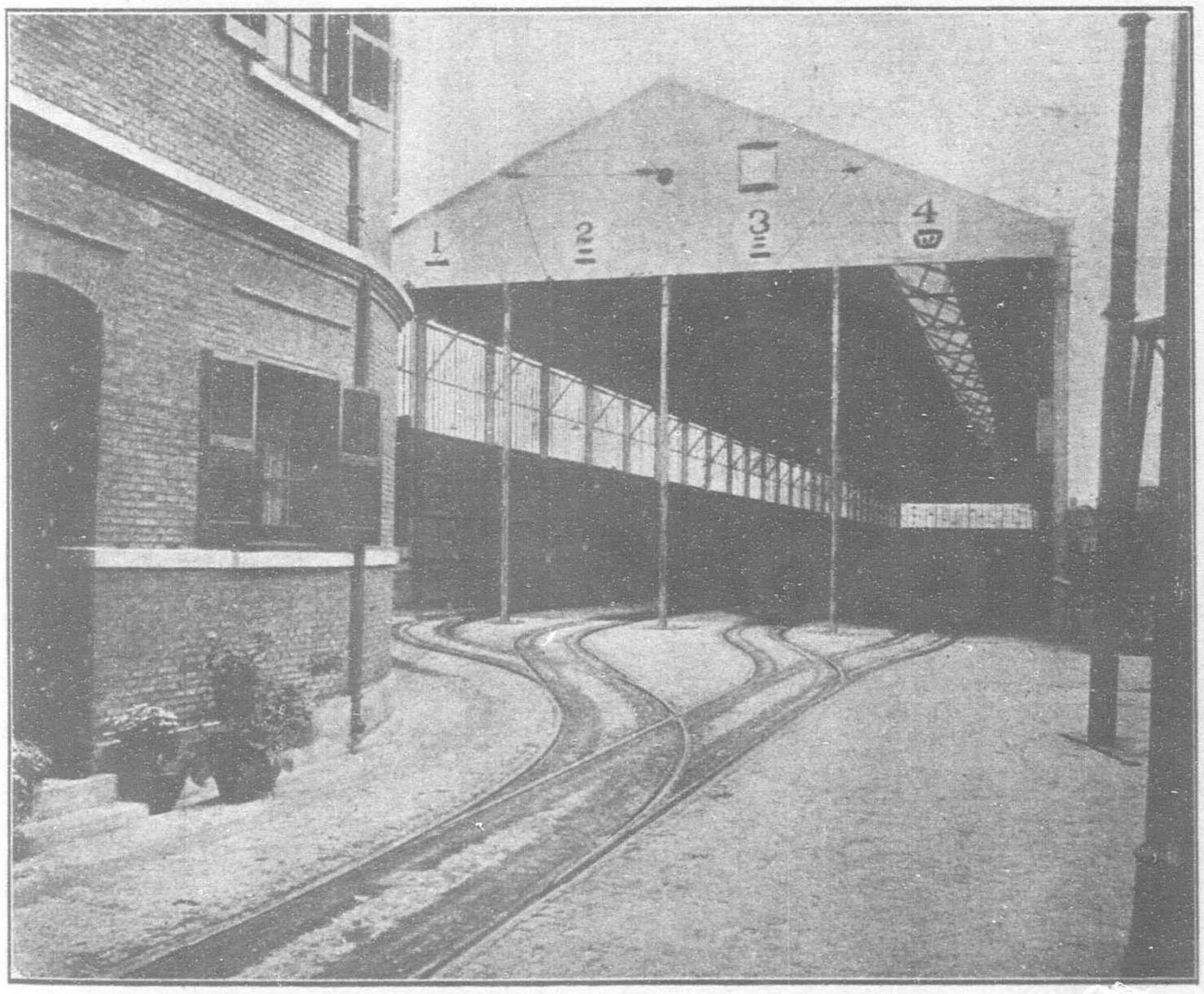


Foreign Settlement Trams.—The up-to-date Mid-Entrance Cars now in general use.

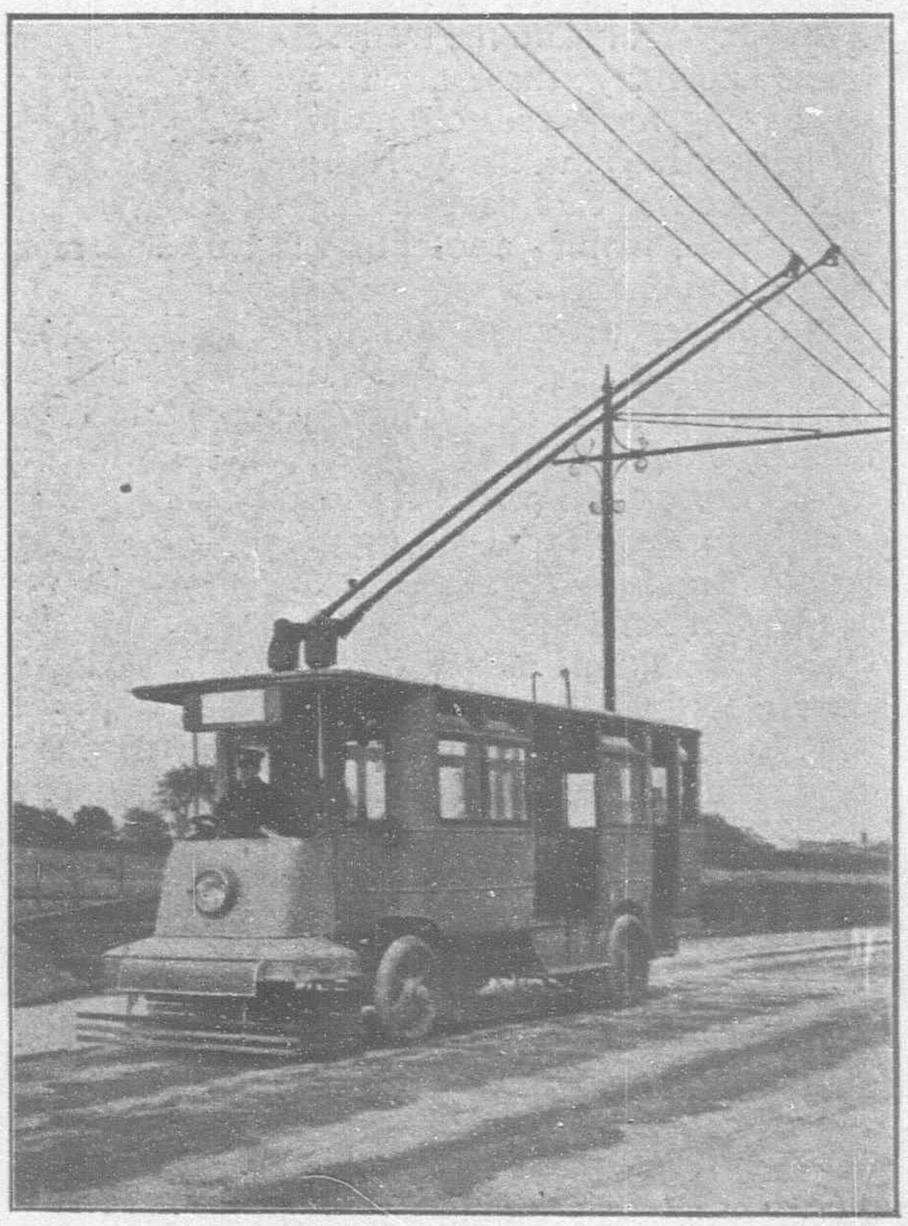
to an arrangement which meant, in effect, that the Company would not have to pay double fixed charges on current taken beyond the output originally estimated. This arrangement provided for a fixed charge of 4,799 taels per month for a demand not exceeding 900 kilowats, plus a flat rate of 1.5 tael cents per unit for each unit consumed. The result for a consumption of 2,859,334 units in 1912 was an over-all charge equal to 3.51 tael cent per unit supplied. The revision due at the end of the first period of five years (March 5, 1913) resulted in a reduction of the fixed charge to 3,952 taels per month for a demand not exceeding 900 kw. plus a flat rate of .789 tael cent per unit supplied. The effect of this reduction is shown by the figure for the overall charge per unit for the period from March 5, to December 31, 1913, which was 2.30 tael cents.

CONSTRUCTION AND EQUIPMENT

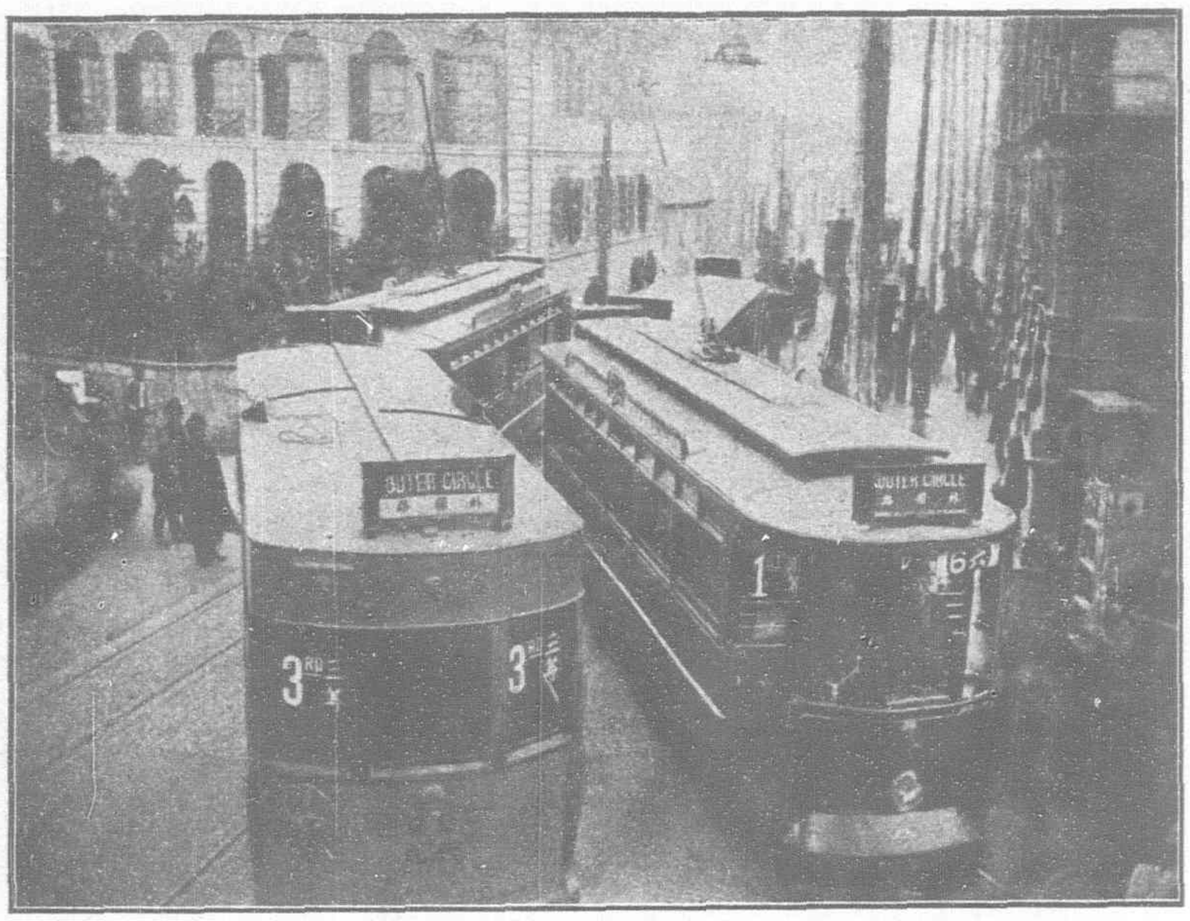
The franchise having been granted, construction of the track, cars, car sheds and repair shops was started. The concession stipulated for conformity with the British Board of Trade Regulations and these have been complied with. In the way of rolling stock the Company had to provide sixty-five single-deck double-entrance cars, each to seat thirty-two persons, twelve in the first class and twenty in the second class, and each equipped with two twenty-five horse-powor motors. It was required that each car should develop a speed of 18 miles an hour. For the complete equipment the contract price was £277,000. Including



Foreign Settlement Trams.—The Wayside Car Shed.



Foreign Settlement Trams.—One of the new railless trams.



Foreign Settlement Trams.—Corner of Seward Road and Minghong Road.

Preliminary Expenses, additional rolling stock, car sheds and other items, the total expenditure for capital purposes was £388,299 at the end of 1913.

INAUGURATION AND DEVELOPMENT OF SYSTEM

The system was inaugurated in March, 1908 and in March, 1914, the Company was operating its cars over 9.17 miles of double track and 7.15 miles of single track, or the equivalent of 25.7 miles of track measured as single, practically the same length as that opened in 1908. The number of motors in service in March, 1914, was eighty and the trailers numbered forty; these are this year being increased to 90 and 55 respectively, whilst 7 Railless Electric cars are being introduced, making a total of 152 cars as compared with 65 when the system opened.

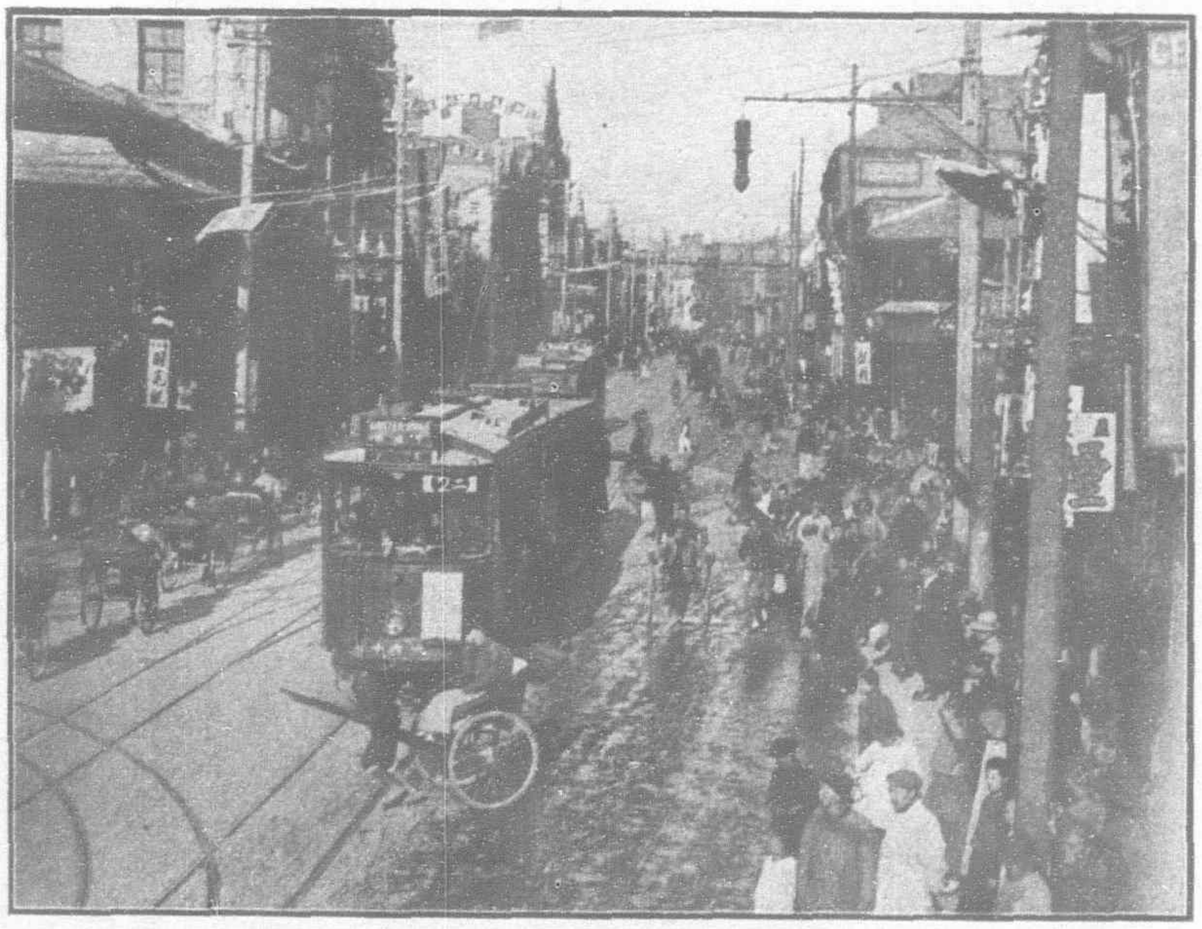
Mr. D. McColl, General Manager of the Shanghai Electric Construction Co.

Another proof of development is supplied by the figures relating to passenger traffic. In 1909, the first complete year of working, 11,772,715 persons were carried, and in 1913 the number had increased to 47,686,648, while it is estimated that about 60,000,000 will be carried this year. For the first five months of the year (usually the lightest) 21,582,944 passengers were carried as against 17,270,360 in the first five months of 1913. To build up the traffic was a problem complicated by the special conditions that exist in China. The 1st class traffic is catered for by Season Tickets, reduced recently from $8 to $6 per calendar month, and by moderate differential fares. Books of coupons are also issued at 36-3 cent coupons or 54-2 cent coupons for $1. As regards 3rd class, the standard of living is so low that particular attention had to be paid to the ability of the native population to pay for the service offered them. The policy adopted of low differential 3rd class fares designed to attract the native population has justified itself by its remarkable success. As time went on the management afforded more liberal facilities, though the fares in comparison with those charged on European and American systems were low from the first. Half-mile journeys can now be travelled 3rd class for 1 cent and the other distances are approximately at *pro rata* fares up to a maximum of 8 cents. To give an exact equivalent in English or United States currency for Shanghai fares requires deduction of currency depreciation loss. The only thing about a cent in China that can be absolutely relied upon is that it is never worth a cent. At present it is worth barely ¾ths of a cent. = about 1/6th of a penny or 1/3rd of a United States cent. The loss on this debased money for the first five months' operations in 1914 was no less than Mexican $120,655, over $6,000 more than was the case in the similar period of 1913. The Chinese authorities still adopt the time-honoured, but economically disastrous, system of turning out unlimited quantities of token coins, and recently unusually large quantities have been coming to Shanghai, apparently from the Nanking Mint. It is to be hoped that the Chinese Government will restrain this indiscriminate overproduction of debased coins in the interests of the community generally and as soon as possible standardize its currency on a really sound basis.

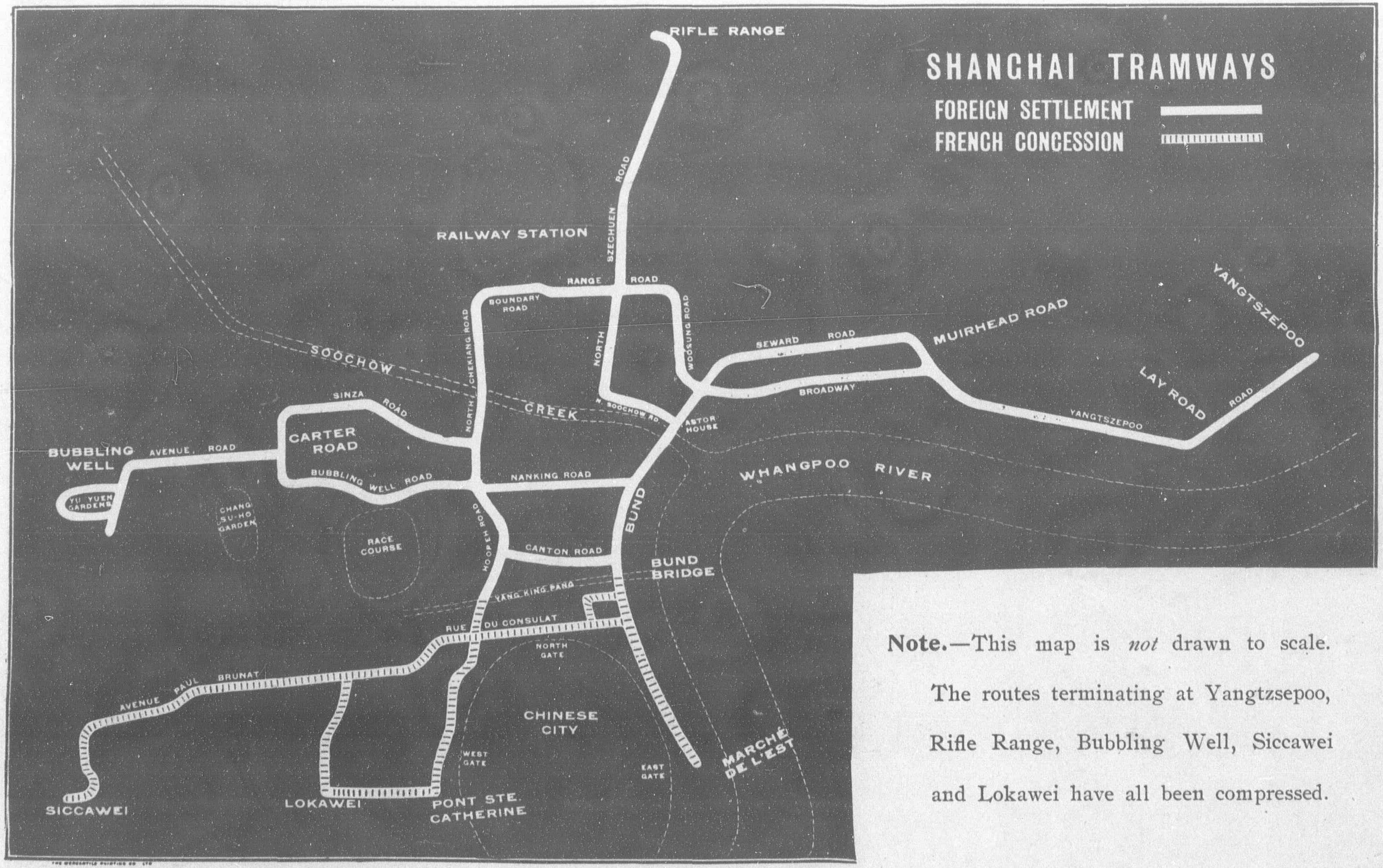
COST OF OPERATION

The following table shows the cost of operation, revenue and loss from currency depreciation for the last three years in Mexican currency:—

Items	1911	1912	1913
Total gross receipts	$809,964	$1,042,785	$1,183,942
Less loss by currency depreciation	168,848	239,375	258,810
Effective receipts	641,116	803,410	925,132
Working expenses	425,160	486,459	495,093
Excess of receipts	215,956	316,951	430,039
Less royalty paid to Council	31,783	39,784	46,018
Working profit (subject to London expenses and depreciation)	184,173	277,167	384,021



Foreign Settlement Trams.—Nanking Road.



Note.—This map is *not* drawn to scale. The routes terminating at Yangtzsepoo, Rifle Range, Bubbling Well, Siccawei and Lokawei have all been compressed.

The tram systems of the Foreign (International) Settlement and the French Concession. A plan on another page shows the route traversed by the Chinese (Nantao) tramway.

Foreign Settlement Trams.—Inside training of motormen.

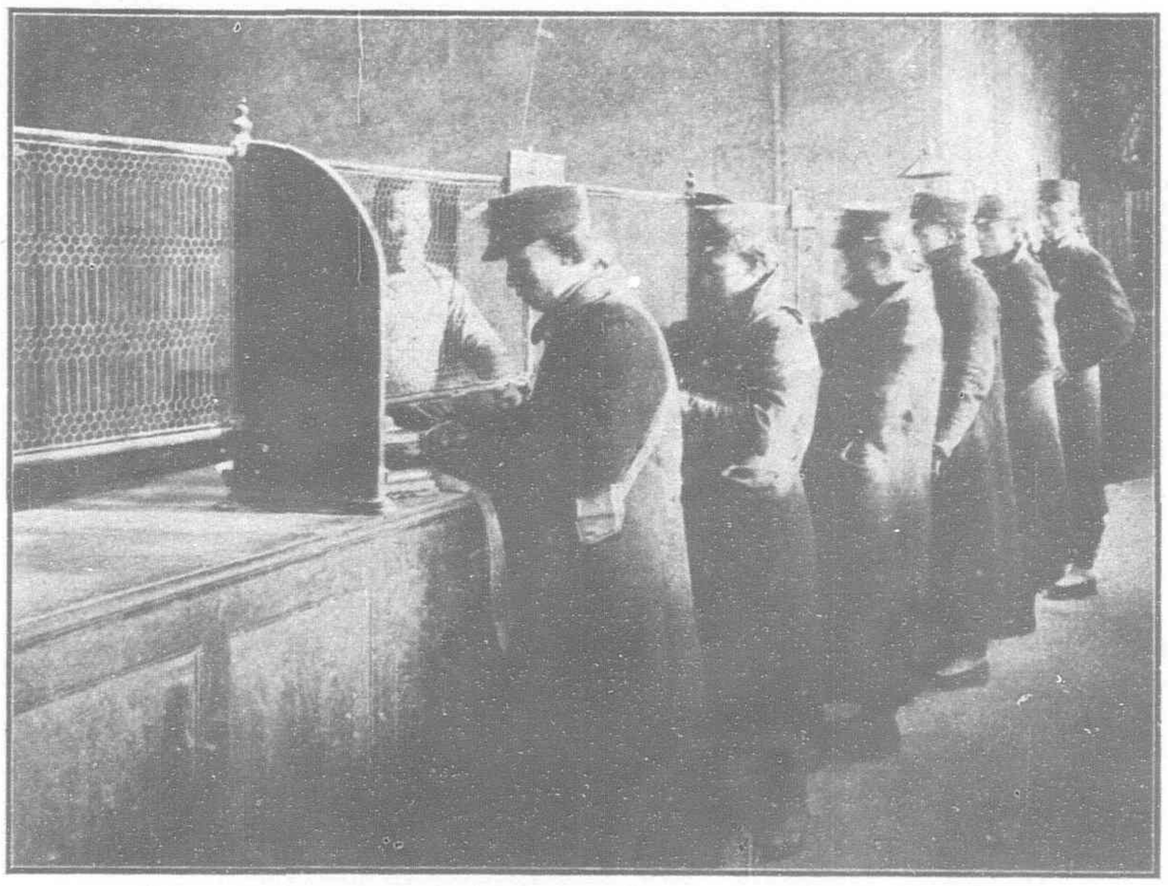
On another basis the following figures in Mexican currency will be found interesting:—

	1909	1910	1911	1912	1913
Effective receipts per passenger (cts.)	3.86	2.95	2.35	1.97	1.94
Working expenses per passenger ,,	3.45	2.30	1.67	1.29	1.13
Working profit per passenger ,,	.41	.65	.68	.68	.81

The capital of the Company is £320,000 and no dividend was paid until 1912 when a distribution of five per cent. was made. On May 14 last at the eighth annual meeting of the Company a dividend of seven per cent. for 1913 was declared, while £10,000 was placed to renewals account and £3,000 was written off preliminary expenses account. At December 31, 1913 the Renewals fund stood at £27,737 and up to that date sums totalling £12,027 had been written off Capital account under the heading of Preliminary Expenses and general expenditure during construction.

RAILLESS CARS

Owing to the extreme narrowness of most of the streets not yet supplied with trams, no very great addition to the mileage of track may be anticipated, at all events until the Settlement is extended. There is, however, great need for extended communication facilities in many of these narrow streets, and consequently the Company made an investigation into the possibilities of Railless Traction, the General Manager in 1912 inspecting such systems on the Continent and in the United Kingdom. Upon his recommendation, the Company, early in 1913, applied for the permission of the Municipal Council to establish a preliminary Railless route. Owing to unforeseen delays the cars ordered from the Railless Electric Traction Construction Co., Ltd., have not yet been delivered, and consequently this interesting innovation has not yet been made in Shanghai, although it is expected to be in operation in August or September. There seems good reason to believe that the railless system will prove as successful in Shanghai as it has elsewhere. Indeed, many incline to the belief that most extensions to Tramway systems will in future be made by means of railless vehicles. Experience in Great Britain has shown that the cost of installation is much less than the average cost of tramways in that country. The heaviest items of expenditure in the construction of tramways are in connection with the permanent way and road-widenings, whereas any road suitable and wide enough for ordinary traffic is suitable for railless cars. A conspicuous advantage in favor of the railless car is that it can be steered through other traffic with the greatest ease and pass obstructions with the same facility as any other road vehicle. It is, therefore, free from a handicap which, in the case of tramways, is often serious, particularly in narrow streets where the tramcar is continuously impeded by vehicles standing at the roadside or to whose slow progress it is forced to accommodate itself. From the passenger's point of view the railless car is preferable as it can be drawn up to the kerb to take up or set down passengers.



Foreign Settlement Trams.—Conductors paying in at Cash Office.

Foreign Settlement Trams.—Training Conductors.

THE CAR SHEDS AND SHOPS

The Company has fully equipped car sheds at Bubbling Well and at Wayside. The car-repair shops, which are at Bubbling Well, consist of a machine shop, smithy, brass foundry, armature shop, coil room, carpenter shop, painting shop, also general overhauling bays.

A 10 horse-power motor drives the main shafting which, in turn, drives the various machines in the machine shop by means of pulleys and belts.

The machines used include the following:—

A wheel tyre turning lathe, used for re-turning the tyres of car wheels after the flanges have worn thin.

An emery grinder by Mitchell, Graham & Sons, Edinburgh.

A high speed drilling machine, this is used for drilling small holes (up to $\frac{1}{2}$") in metal fittings.

A lathe, 4".

A lathe, 6".

A lathe, 10".

A large drilling machine by J. Butler, this is used for drilling large holes (up to 3″) mainly in steel plates for renewing the checks of rails at curves.

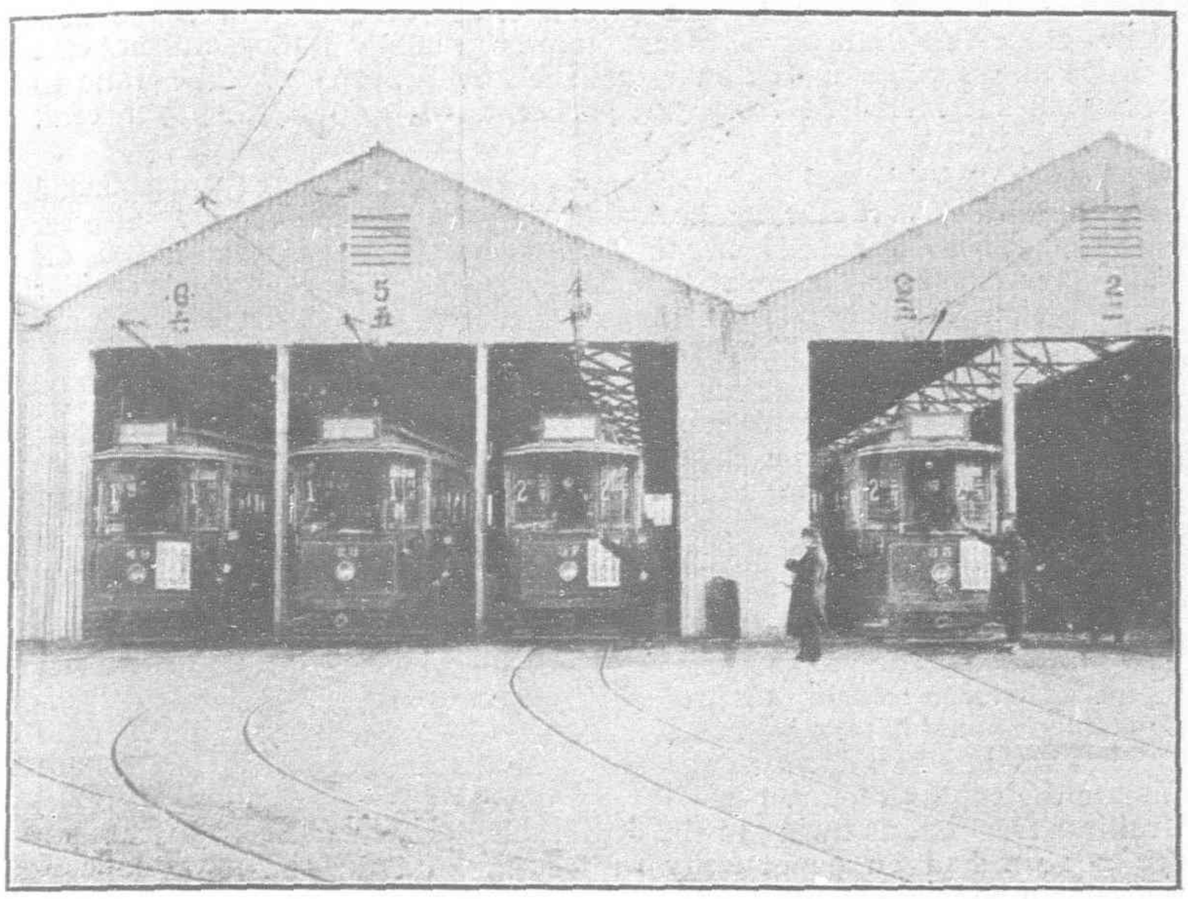
Metal shaping machine by Perkins & Co., Leeds.

Buffing or polishing machine by own shops.

Drilling machine 20″.

Hydraulic wheel press.

Bunsen burner for shrinking new tyres on to car wheels.



Foreign Settlement Trams.—Bubbling Well Car Sheds.

There is also as part of the shop equipment, a complete oxy-acetylene welding and cutting outfit. The Company finds considerable economy in generating its own acetylene. The whole of this plant is mounted on a flat trolley, which can be transferred to any part of the system. Electric arc welding is also carried out by a small plant designed by the shop staff. The following additional machine shop equipment has recently been installed:—

One 18″ shaping machine and one sensitive drilling machine.

Steel motor pinions are imported, the gear ratio being 14.68. The smithy is equipped with 4 fires. No power hammers are yet in use. The brass foundry equipment consists of a 60-pound Carr's patent furnace, one gas fired core oven, one pattern loft and one gas fired babbitt metal pot. Everything that is required in the way of brass fittings is cast in this shop, small cast iron work also being done now, and the re-babbitting of car bearings is also carried out by the foundry staff.

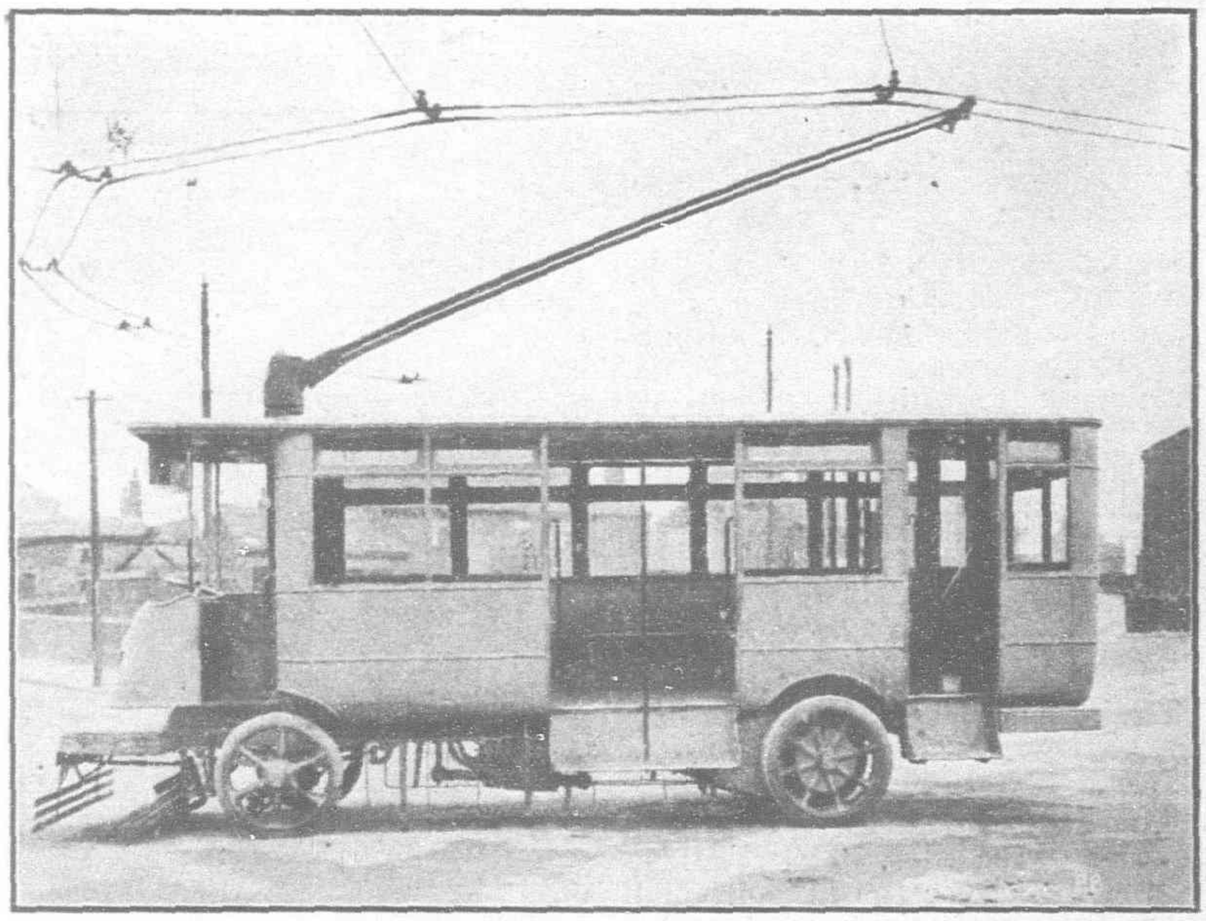
The armature shops are also equipped with one electrically heated drying out stove, one gas-fired soldering-iron stove, and the usual racks and forms for winding field and armature coils. All new armatures and field coils are made by the Company and old ones repaired. The Company also assembles its own commutators (the copper cylinder arrangement on the end of the armature). These commutators become worn down and require, from time to time, to be machined or to be replaced by new ones. In the event of serious faults the coils of the armatures require to be replaced by new ones. In the Carpentry shop there is a band saw by Jones, Burton, driven by a 5 H.P. motor.

There is a Ticket Printing Room with a machine that turns out 360 tickets a minute. The Machine, which is driven by a 1½ H.P. motor, prints all the tickets required by the Company as well as those for the French Tramways.

There is also a sand drying plant for drying the sand before it is placed in the sand boxes of the cars; this plant is driven by a 15 H.P. Bruce Peebles motor. When a car has to be stopped suddenly to avoid an accident, the Motorman can, by striking with his foot a pin on the floor where he stands, release sand on the rails in front of the wheels where it assists the braking.

Foreign Settlement Trams.—Bubbling Well Work-shops, the Smithy.

The car bodies are built locally by Chinese contractors to designs and specifications supplied by the Company. The contractors simply construct the bare body, which is delivered to the Company's shops, where the fitting of trucks and electrical equipments, car furnishings, wiring, painting and varnishing are done by the shop staff. The weight of the latest type of motor car is 20,000 lbs. fully equipped. They are constructed of teak with sheet steel panelling. The trailer cars weigh about 8,000 lbs. The British Westinghouse Company supplied the 30 horse power motors for the latest cars.



Foreign Settlement Trams.—The railless car.

EMPLOYEES

The local officials with previous Tramway experience elsewhere, including the General Manager, number 14, and are all British.

Most of the employees are Chinese. That is to say the fitters, wiremen, painters, carpenters, turners, smiths, moulders, trackmen, traffic regulators, timekeepers, motormen, conductors, and coolies are Chinese. Among the traffic inspectors are Chinese, Japanese, Koreans and Indians. Portuguese are represented on the clerical staff.

The wages paid to the principal groups of Chinese employees are:—

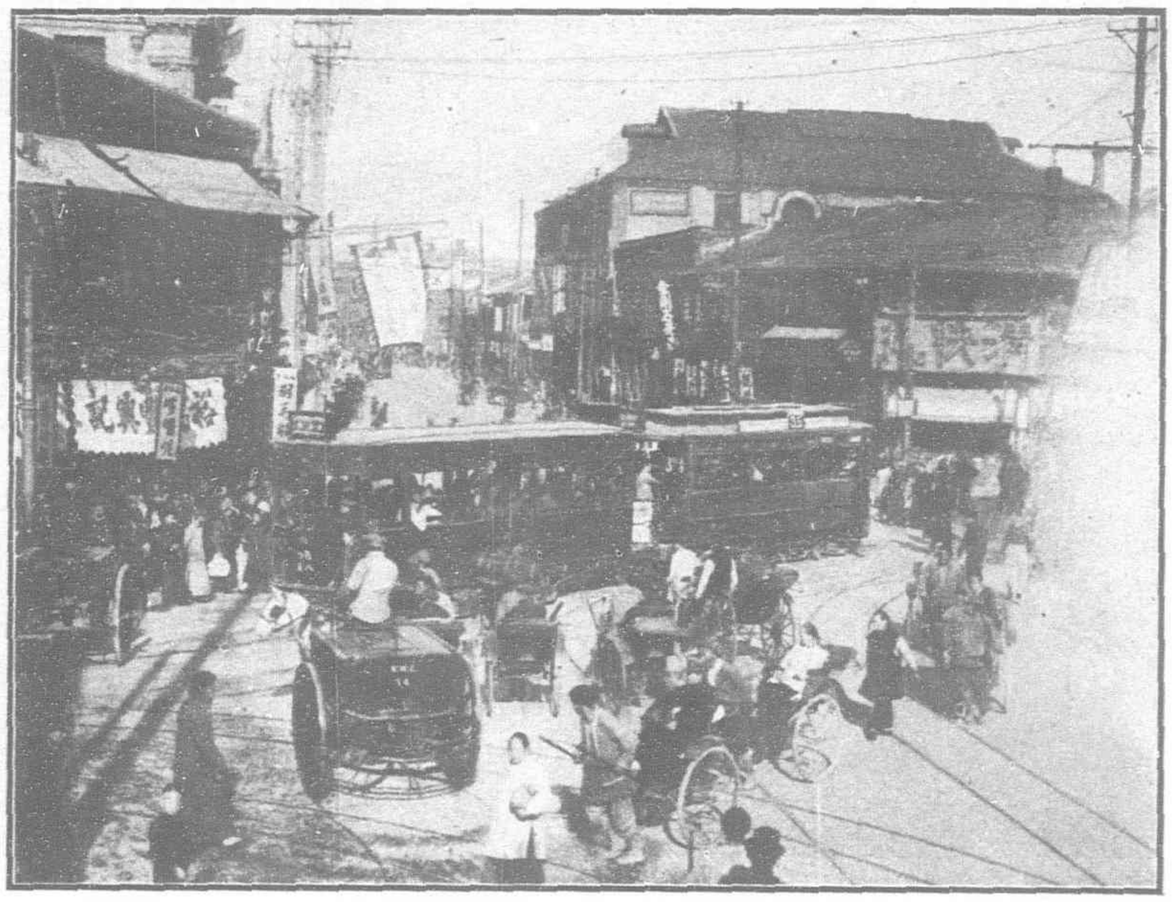
Employees	Wages per month	Employees	Wages per month
Fitters	Mex. $22 to $35	Smiths	Mex. $23 to $24
Wiremen (including electricians)	„ $23 to $45	Moulders	„ $14 to $20
Painters	„ $17 to $28	Motormen	„ $12 to $18
Carpenters	„ $15 to $28	Conductors	„ $12 to $22
Turners	„ $23		

In addition, bonuses are paid to the above employees for good service.

Coolies are paid at the rate of 30 Mexican cents per day.

There are at present slightly over 1,000 employees.

The Chinese have proved themselves very good Motormen and Conductors and, notwithstandlng the difficult traffic conditions of the streets, and the enormous number of passengers carried by the Company, the record for accidents is a remarkably good one.



Foreign Settlement Trams.—Corner of Nanking and Chekiang Roads.

THROUGH RUNNING

The usefulness of the trams has been largely increased by the arrangements with the French Company for through services which came into operation in 1912 and which have recently been augmented. The arrangement has been of great advantage to the public, and it is believed, to both Companies.

THE LAST ANNUAL MEETING

It may be fitting to close this article with an extract from the speech of the Chairman of the Company, Sir Alfred Dent, K.C.M.G., at the eighth annual meeting of the Company held in London, on May 14. He said, *inter alia* :—

"The gross traffic receipts for the year amount to £117,986 10s. 5d., from which has to be deducted £25,880 19s. 4d. for loss in exchange, leaving net effective receipts £92,105 11s. 1d., against £79,783 4s. 1d. in 1912. After further deducting the Shanghai working expenses, there remains an operating profit of £37,976 4s. 10d., as compared with £27,161 9s. 7d. in 1912.

Including £1,974 5s. 6d. brought forward, the balance of net profit available, after charging London expenses and interest, amounts to £36,700 7s. 2d., against £28,028 17s. in 1912, and this we propose to deal with by transferring to reserve for renewals £10,000, to reduction of preliminary expenses £3,000, to payment of a dividend of 7 per cent. (less Income Tax) for the year £22,400 leaving £1,300 7s. 2d. to be carried forward.

"The reserve for renewals, after charging an expenditure of £95 17s. not included in the ordinary working expenses will then amount to £27,737 8s. 8d., as shown in the Balance Sheet.

"Power expenses at £10,794 5s. 2d., against £13,137 2s. 2d., show a decrease of £2,342 17s., owing to the revision of the rates. This revision, after five years, we were entitled to claim under Clause 10 of the original power agreement, and we gave notice accordingly in 1913, but the negotiations extended over a whole year before an arrangement was arrived at with the Council.

"Effective receipts show an increase of £12,227 2s., and it is a satisfactory feature that, of this amount, £10,814 15s. 3d., or 88 per cent., has been retained as operating profit. This is attributable, partly to the reduction on cost of power, and to the fact that the growth of expenses has been less in proportion to our gross earnings, notwithstanding that we have run nearly 137,000 more car miles this year than last.

"The expense ratio to effective receipts has been reduced from 65.50 per cent. to 58.50 per cent. This includes the 5 per cent. Royalty on gross receipts which we have to pay the Municipal Council, and the heavy loss in exchange. These items should be excluded when comparing our ratio with systems in other towns not similarly penalised, when it would work out at 42 per cent. for 1913, against 47 per cent. for 1912. The average expense ratio to gross receipts for all the tramways of the United Kingdom for 1912-13 is said to be 62-68.

"The loss by depreciation of subsidiary coinage during the year was equal to 23.19 per cent. of the gross cash collected, or 8.09 per cent. on the share capital, as compared with 24.55 per cent. in 1912, or 7.64 per cent. of the share capital. This shows a slight improvement per cent. in the currency itself, which I fear will not be continued into 1914, as the market is again being flooded with copper coins from the native mints, a protest against which action is being made to the Chamber of Commerce and the Court of Consuls in the interests of the Tramway Cempany and the trading community. This loss in exchange, as you are aware, is a new feature since the Tramway Concession was granted in 1905, and has cost us since the service has been established over £100,000. The ratio to our capital has increased from 3.63 per cent. in 1909 to 8.09 per cent. in 1913.

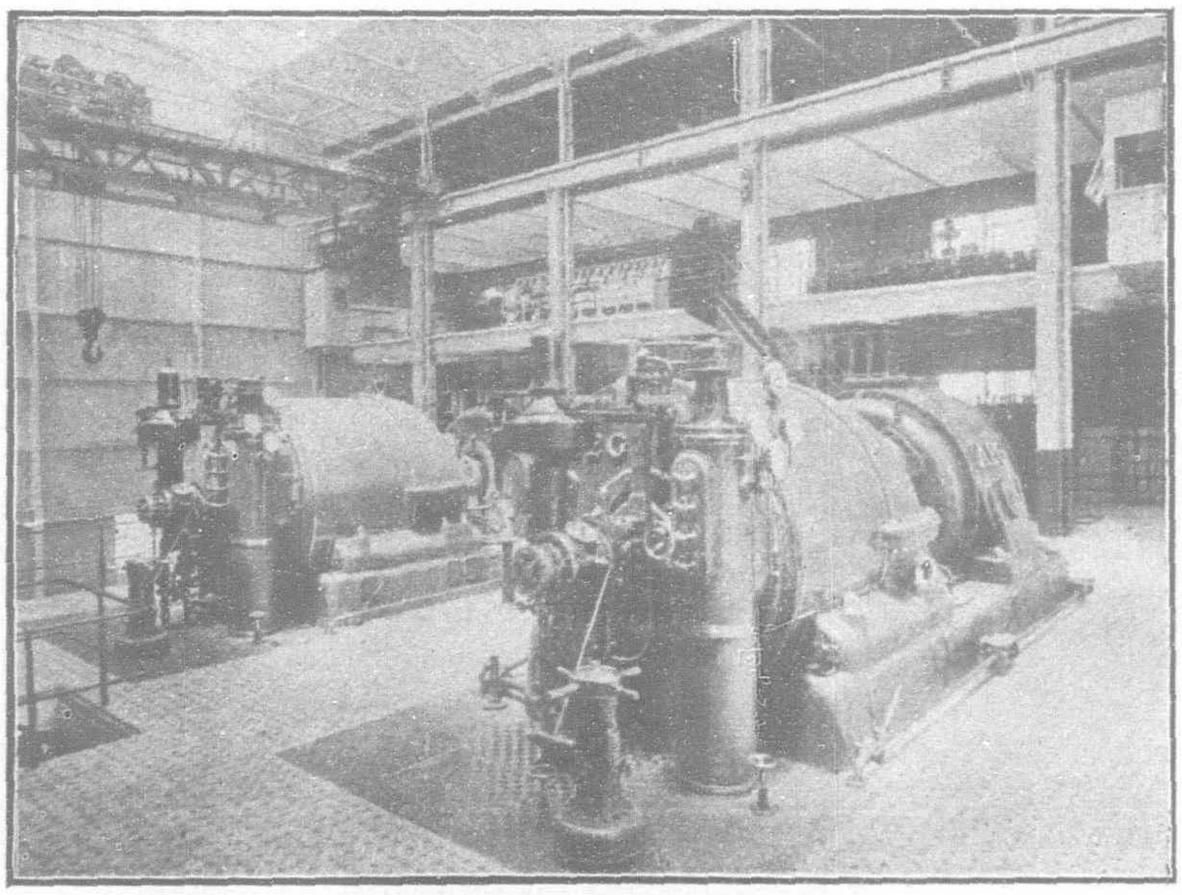
"In spite of this serious handicap, we are able this year to recommend a dividend of 7 per cent. against 5 per cent. last year. We have also set aside £10,000 to renewals account, and we have written £3,000 off preliminary expenses account. The Directors and the Auditors consider the provision for these two items as prudent, and I have no doubt Shareholders as a body will approve the soundness of this policy.

"On the general question of finance you will notice that, after providing for a considerable sum of capital expenditure, the loan from our Bankers stands in the Balance Sheet at £16,000. It stands to-day at £12,000, against which we are expecting substantial remittances from Shanghai. There is however, a further expenditure on capital account in contemplation, for which provision will have to be made when the necessity arises.

"One large item recently brought up for consideration is that of increased office accommodation. We have outgrown our present premises, and unless we can extend our present lease, and also the premises themselves on reasonable terms—which is doubtful—we may be compelled to buy land and build on our own account at no distant date. We also cannot estimate the capital requirements for the development, if thought desirable, of railless traction, as owing to the deplorable delay in delivery of cars we have not yet had an opportunity of testing how far this new mode of traction can be made applicable to Shanghai. With reference to the delay in the delivery of the cars, I have this morning received a telegram from Liverpool saying that the first two will be taken in the *Stentor* on 21st inst.

"Our traffics show continued expansion, as we carried nearly 7,000,000 more passengers last year than in 1912, and the published traffic receipts for the current year, as you will have noticed, have so far shown a satisfactory increase for every week without exception.

"We have added fifteen new motor cars during the current year; the bodies of these motors have been built in our own workshops in Shanghai, with trucks or chassis of a new type supplied by American manufacturers. We have also recently authorised the purchase of a further ten motor cars and fifteen trailers, which will bring our rolling stock up to ninety motor cars and fifty-five trailers, as compared with the original stock of sixty-five motor cars only. There will be a full use for this additional rolling stock, as we anticipate our passengers for the current year will be considerably in excess of fifty millions.



Foreign Settlement Trams.—Two 2,000 K. W. sets of the Shanghai Municipal Electricity plant that supplies the power for the trams.

"Our arrangement for through running with the French company continues to work to the advantage of both companies. The conductors are not now changed at the boundary, but separate tickets are still issued on each company's lines, a system to which the French company wishes to adhere. The French company is about to introduce through running between the French Bund and the Chinese company's line to the terminal station of the Shanghai-Hangchow Railway, and this may lead later on to an arrangement for through running between all three companies, thus

establishing a through tram service from that terminal to the Shanghai-Nanking Railway Station, adjoining our system.

"The success of the tramway companies in Shanghai, and elsewhere in China, has led to inquiries by Chinese authorities as to the possibility of starting tramways in some of their large townships, and our General Manager has been in communication with them on the subject. It may be to our advantage to interest the Company in business of this sort if obtainable on reasonable terms with adequate guarantees.

"As regards our employees (who number 974, as compared with 927 at the close of 1912), I desire to add that they have performed the duties with great credit to themselves and to the Company, especially during those weeks when the Rebellion sent crowds of refugees into the Settlement and into our cars, and at times exposed our men to danger from misdirected shells.

"Gentlemen, I have endeavoured to give you, in as few words as possible, an outline of our doings and progress, but, if further details are required, I shall be pleased to go more fully into the various reports that we have received from our General Manager, Mr. McColl, and particularly into the very able and exhaustive report that he has sent us on completing the fifth year of our existence since the opening of the system. Our best thanks are due to him, no less than to our Local Board, who do so much to promote the interests of the Company and the continued progress of its affairs.

THE FRENCH TRAMWAYS

In the French Concession the tramway system was opened in May, 1908. The lines were built and are operated by the Compagnie Francaise de Tramways et d'Eclairage Electriques de Shanghai, which has its head office in Paris. M. Marcel Coursier is the director in charge in Shanghai, with headquarters at Lokawei, in the French Concession.

The meter gauge was aiso selected for the French lines, and, in fact, the systems are generally similar, so that when joint through running was finally arranged in 1913 there were no difficulties of a technical nature. The first motor-cars were supplied by Messrs. Bruce, Peebles & Co., who had the contract for the rolling stock as well as for the line. Subsequently trailers were ordered from Messrs. Nicholas Tsu and Sin Fah-yung, who performed similar work for the English company. Other trailers and new motor-cars have just been received from Europe, these having been built to the order of the French company by the Ateliers de Construction de Nivelles.

M. Marcel Coursier, General Manager of the French Tramways.

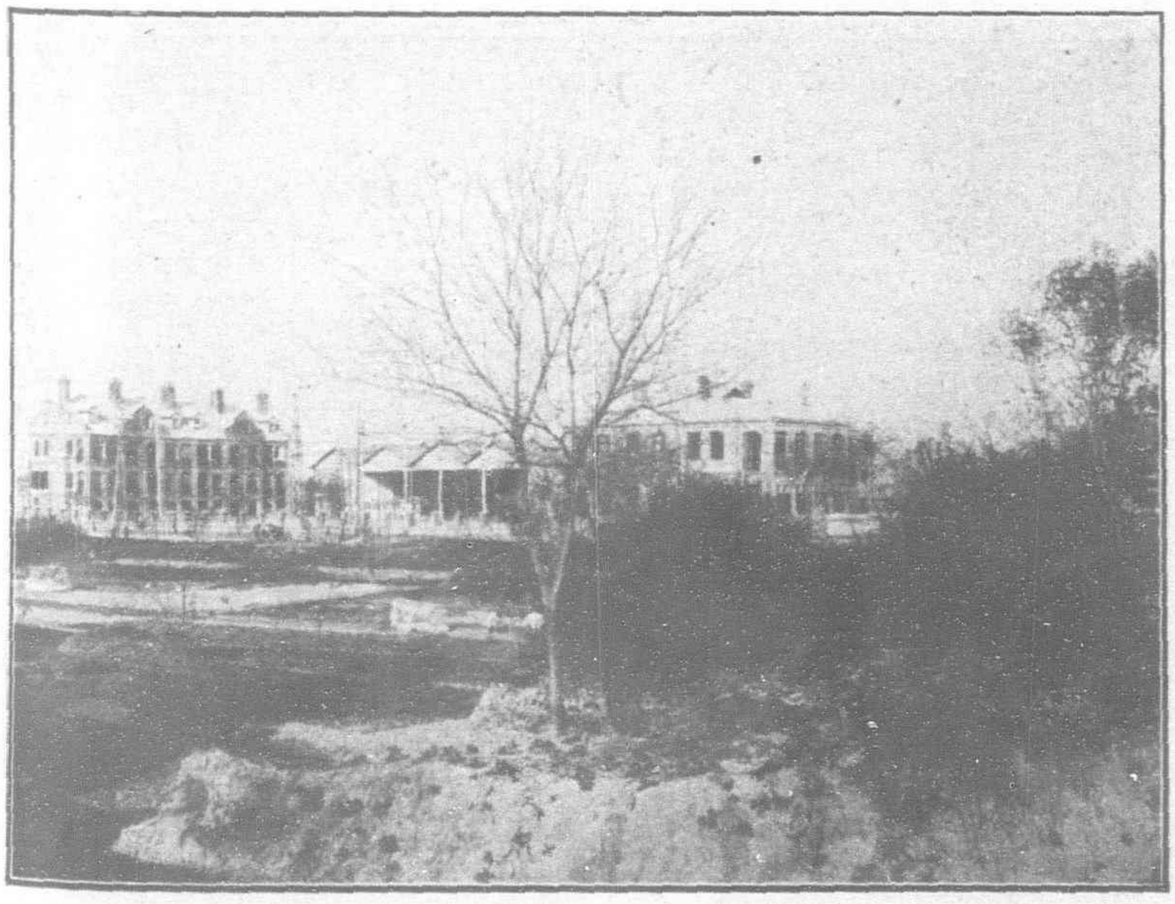
The total length of the track at present, reduced to single line, is: Miles 12.50, out of which are 2.70 Mile double track. In 1912 the company had 28 motor cars and four trailers and these have been increased to 38 motor cars and 14 trailers. Direct current at 550-600 volts is used for traction. Owing to a lesser density of population and lighter traffic, the average speed of the cars is somewhat greater than on the lines in the International Settlement, while the power consumed per car-mile is about ten per cent. greater.

RESULTS OF OPERATION

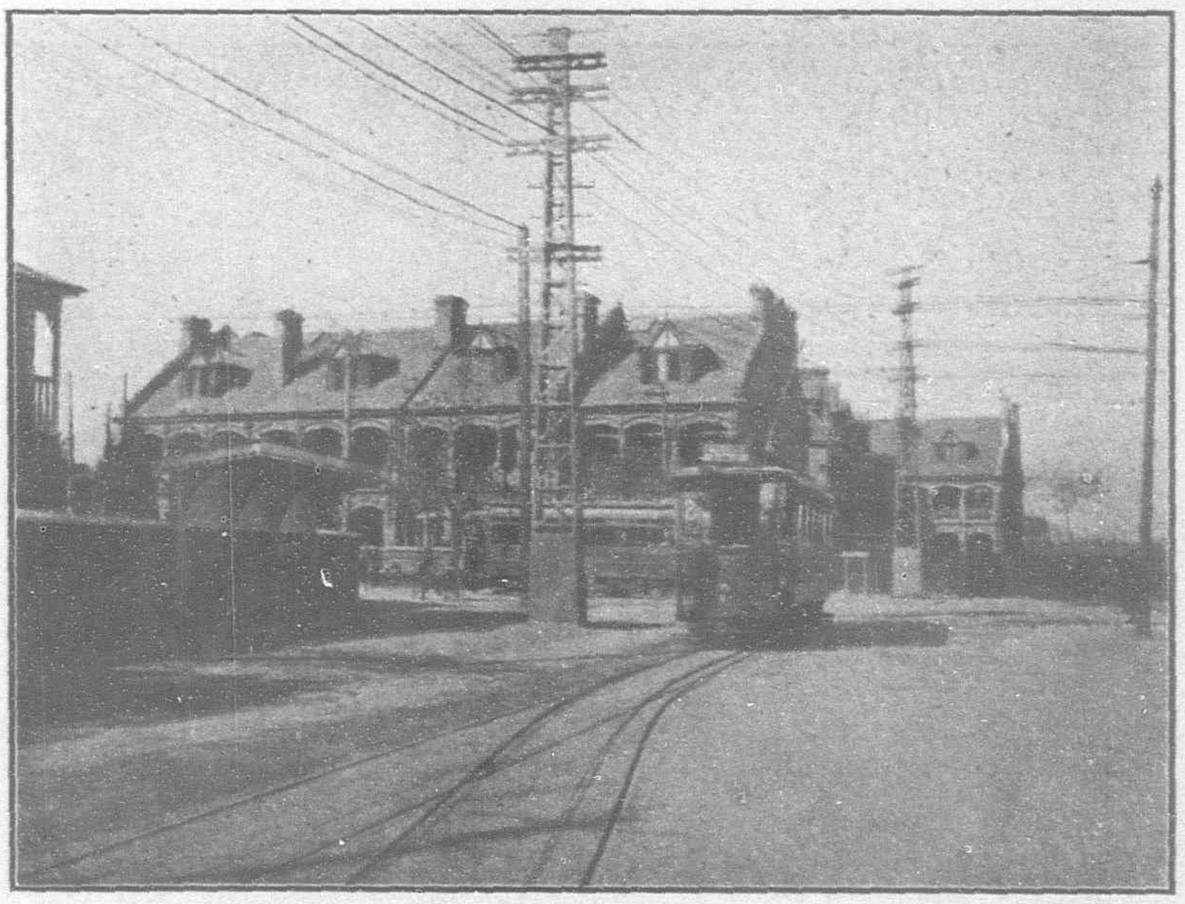
Both first and third class passengers are carried, fares being charged by sections, the rates being for first class from three to fifteen Mexican cents and for third class from one to nine Mexican cents. In 1912 the car mileage was 980,342 and the number of passengers carried 12,299,708, while in 1913 the car mileage was 1,105,000 and the passengers carried 14,778,000.

A comparison of the average number of passengers carried per day in the past four years illustrates the growth in the traffic. In 1909 it was 12,300; in 1910, 19,760; in 1911, 23,200; in 1912, 33,700 and in 1913, 40,290. The gross receipts for these years were:—1909, fcs. 303,436; 1910, fcs. 407,830; 1911, fcs. 478,373; 1912, fcs. 627,111 and in 1913, fcs. 943,000, the loss from depreciated currency not being deducted. In 1909 there was a loss of fcs. 8,667; in 1910 the profit was fcs. 96,034, in 1911, fcs. 138,283, in 1912, fcs. 240,633 and in 1913 fcs. 290,000.

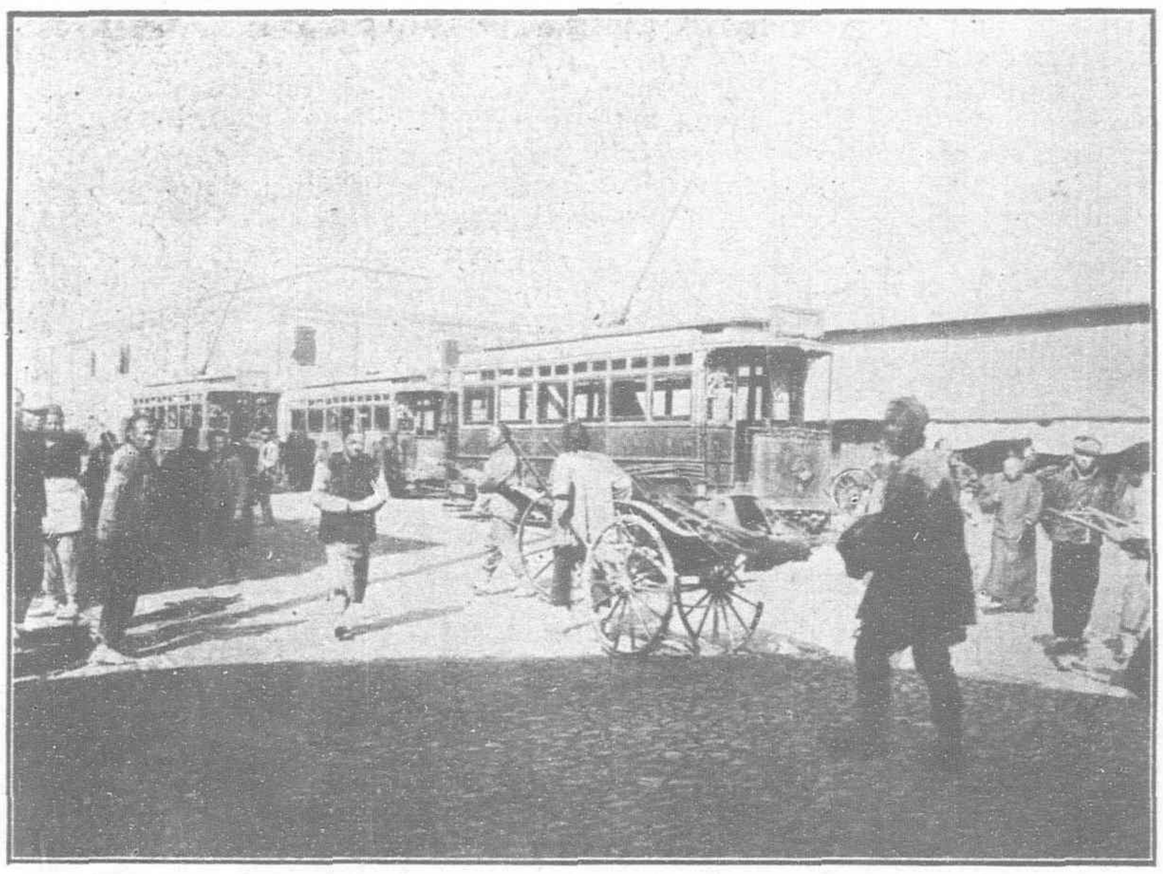
The capital of the company was formerly fcs. 4,200,000, but it has been increased as from May 10, 1914 to fcs. 8,000,000.



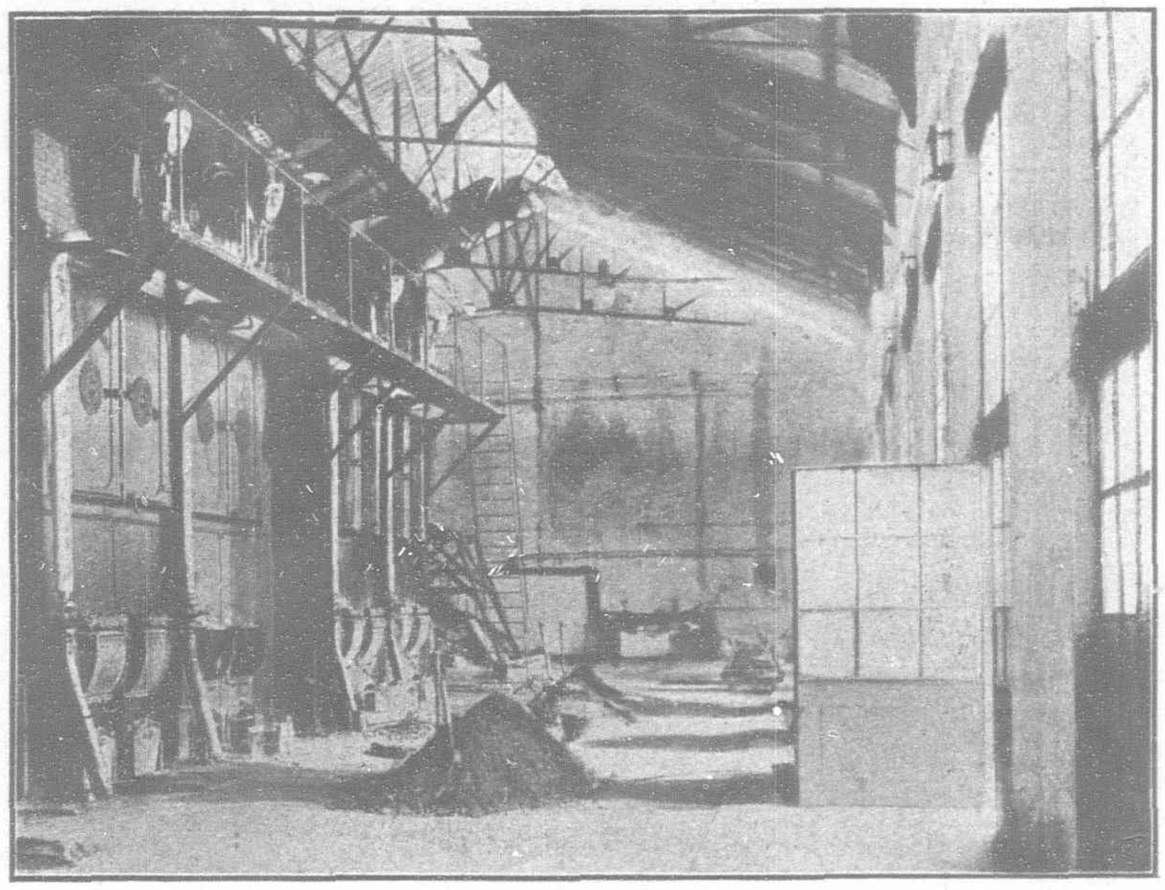
General View of the Lokawei Electric Station and Depot.



Corner of Avenue Paul Brunat and Avenue Dubail.



French lines terminus on Marché de l'est.



Electric Station at Lokawei. The Boiler Room.

A dividend of 5 per cent. on the original capital is to be paid for 1913. The reserves for sinking funds, depreciation, etc., etc., now amount to fcs. 1,164,000.

ELECTRIC LIGHTING AND WATER SUPPLY

Though not coming within the scope of this article it may be mentioned that the French company holds a franchise for electric lighting and water supply in the French concession. The returns show that there were 42,000 ten candle power lamps being supplied in 1913. Until January, 1913, direct current at 240 volts was used exclusively for lighting, but this has been superseded by an alternating current installation giving 110 volts.

POWER PLANT

Steam, at 125 pounds per square inch, is raised in four Babcock & Wilcox water-tube boilers with superheaters, hand stoking only being employed at present. The boiler-feed pumps are two Worthington duplex steam pumps and a vertical triplex power pump from a French maker.

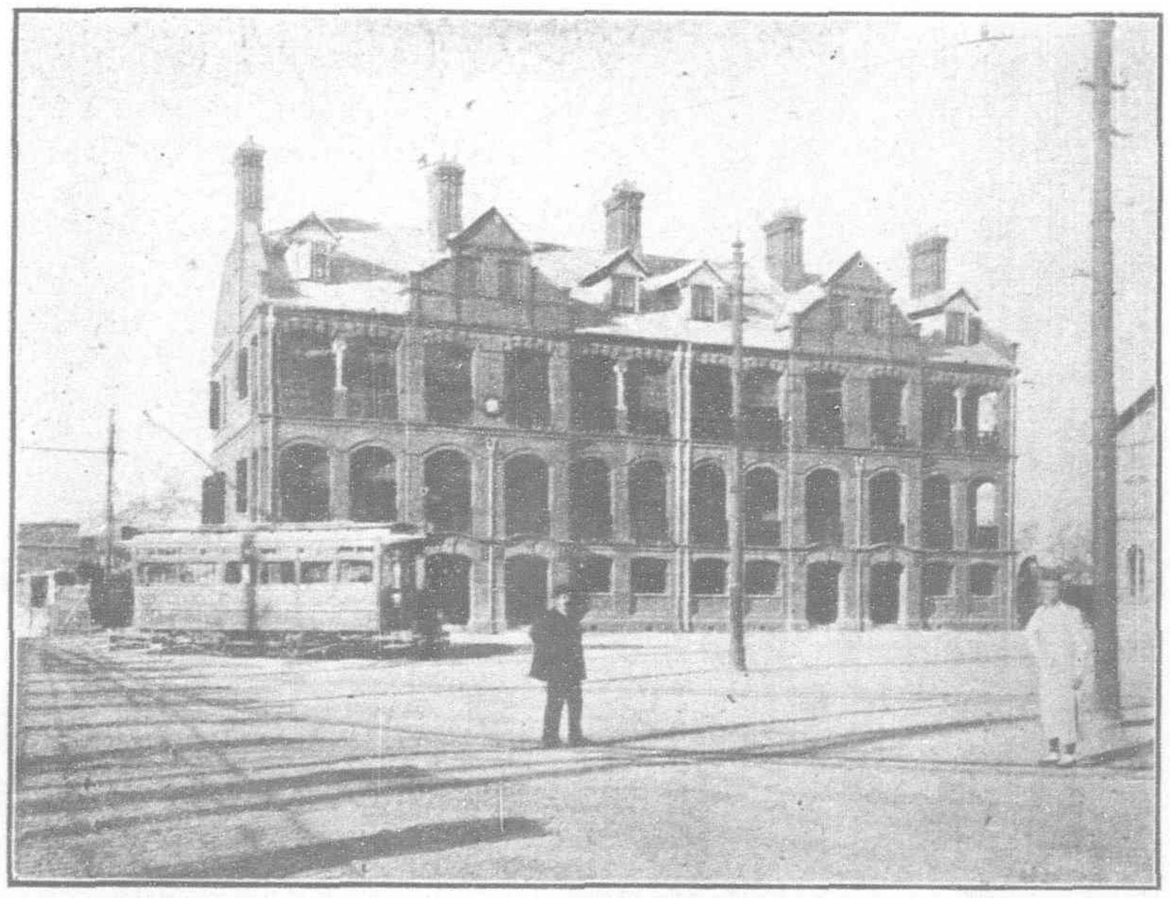
In the engine room there are four cross-compound Corliss-type engines from A. Blondel & Cie., of Lille, each direct coupled to a direct-current dynamo of 550/600 volts, from the General Electric Co., of Nancy, France. Three of the units are of 250 kilowatts, while the fourth is 350 kilowatts. The recently installed alternating current set consists of a horizontal cross-compound engine with Lenz valve gear, running at 125 revolutions per minute, from the shops of Dujardin & Cie., of Lille, with a 375-kilowatt 3-phase dynamo from the Westinghouse Co., of Havre, which is designed for 5,250 volts and 50 cycles. The French Westinghouse Co. has also supplied two motor transformers for converting a portion of the alternating current to direct current. The average cost of generating power in this plant is stated as Tls. 0.018 per kilowatt hour.

Directly underneath each engine is an independent condensing set, supplied by the engine builders. The condensers are all of the surface type, the air pumps being driven from the engine's main shaft, while motor-driven centrifugals handle the circulating water.

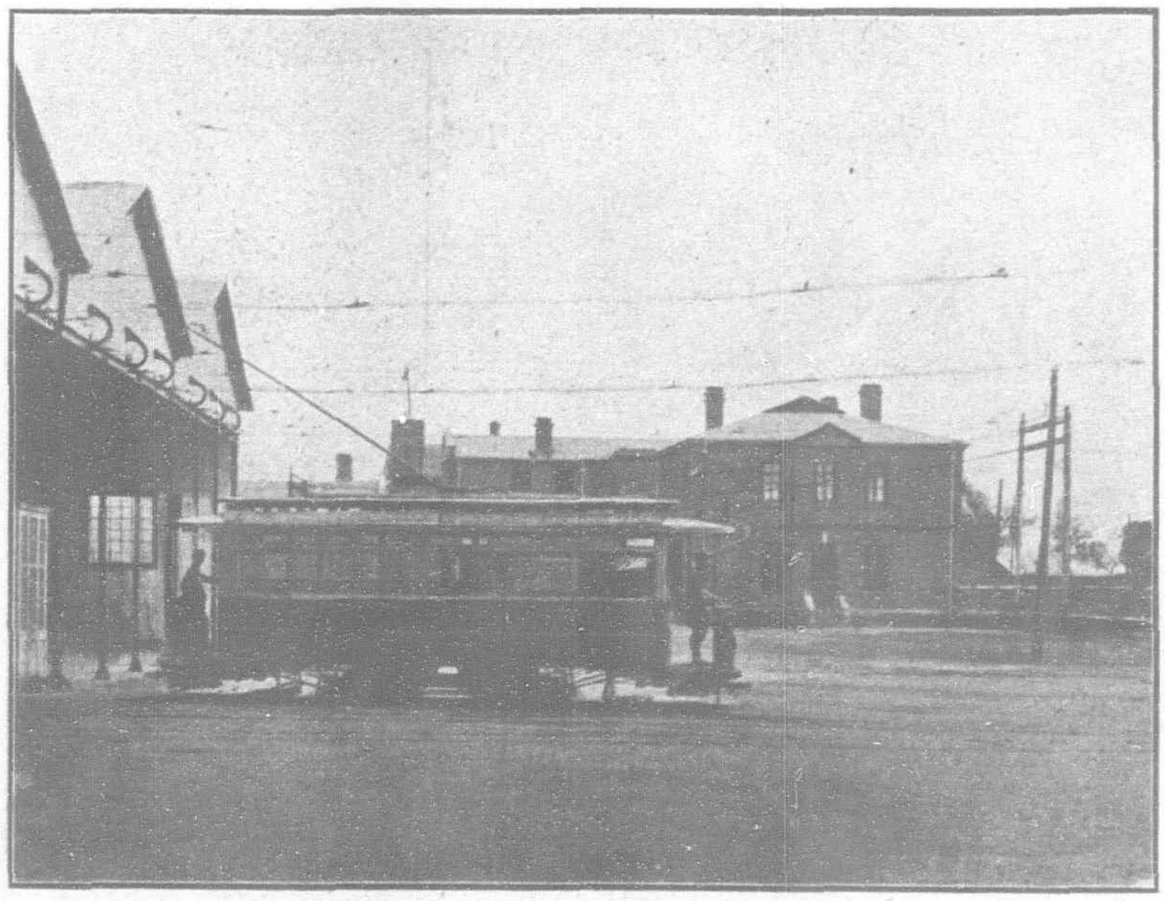
In April, 1913, the consumption of alternating current (for both light and power) was only about 100 kilowatts, as compared with 1,100 kilowatts of direct current—350 kilowatts for power, including the street railway, and 750 kilowatts for lighting. But a rapid increase in alternating current consumption set in, and the company is now planning for the installation of a 1,000, or 1,200 kilowatt high-pressure turbo-alternator set, with additional steam plant. A difficulty lies in the inadequate supply of water for the condensers, as the power plant is not near the river. At present a series of concrete reservoirs, with pipe lines and spray nozzles, is used for cooling the circulating water, but this would not be sufficient to secure the high vacuum required by steam turbines.

SHOPS

The company's car barns and repair shops adjoin the power



Dwellinghouses at Lokawei for the European officials of the French Tramways.



Lokawei—office and depot.

station, all the buildings being of steel, sheathed with either brick or corrugated iron. Only light repairing is done in the shops, which contain a very limited number of small machine tools, all from French makers.

THROUGH RUNNING

As already stated through running has been in progress with satisfactory results on the French company's lines and those of the International Settlement. An agreement has been entered into with the Chinese Tramway Company for through running not only on the Franco-Chinese system, but on several other routes as well. An arrangement has been made between the companies for a double line from Porte de l'Ouest to Porte de l'Est, which will be half French and half Chinese.

THE NANTAO TRAMWAY

The Nantao Tramway formally started its service on August 11, 1913. The occasion was a memorable one, inasmuch as this tramway was the first to be financed, built and managed, by Chinese. The only foreign assistance was that given by Mr. E. Kocher of Messrs. Siemens China Company, who supervised the work and retains the position of consulting engineer to the Company. Apart from the assistance and advice given by Mr. Kocher the enterprise has been entirely carried through by the Chinese themselves.

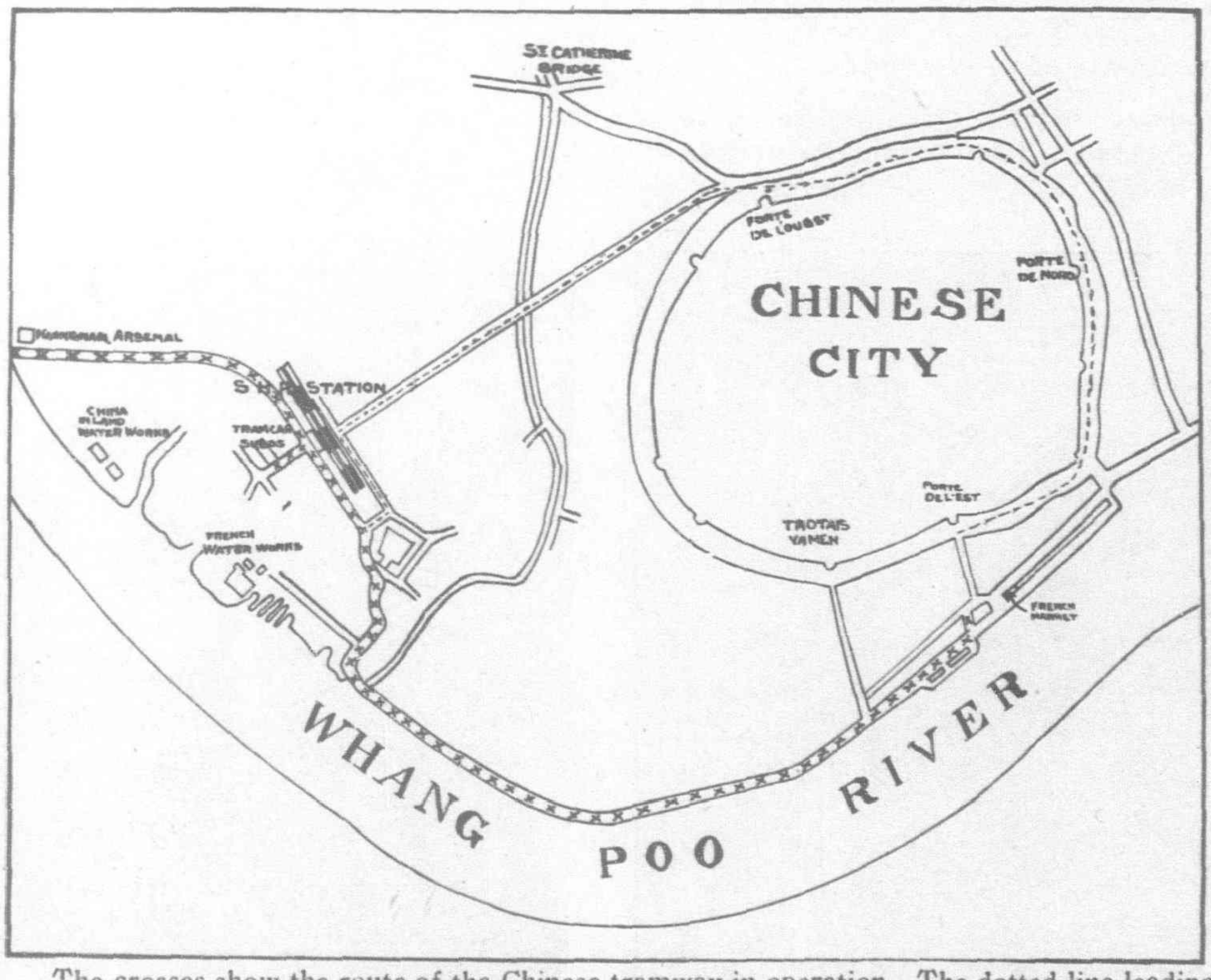
Nantao Tramway.—Mr. Lo Pah-hong, who formed the Nantao Tramway Company.

The Nantao Tramway Company was formed in April, 1912, mainly as a consequence of the efforts of Mr. Lo Pah-hong, who was the prime mover in the whole affair. Mr. Lo Pah-hong obtained the consent of the authorities and succeeded in interesting several of the rich Chinese residing in Nantao. As a result the Nantao Tramway Company was formed with a capital of about Tls. 200,000.

The line starts from the Marché de l'Est (in Chinese Chilopu) and runs along the Chinese Bund to the south end of the Bund. From the Marché de l'Est to Tungkadoo there is a double track. From Tungkadoo to the Shanghai - Hangchow Railway Station—the original terminus of the line—there is a single track with loops every 400 metres. The length of the line between Marché de l'Est and the Shanghai-Hangchow Railway Station is about 2½ miles, and the extension to the Arsenal is about three quarters of a mile. There are about 32 curves in the whole line, and the rails were sent out from Germany bent into the shape required.

The material, rails, cars, etc., were ordered in May 1912, but the rails did not arrive until March 1913. The delay was occasioned by a fire breaking out on the steamer conveying the rails, while in the Mediterranean, and as a result the vessel was compelled to return to Hamburg. Owing to the delay thus caused the work could not be started until March, but it was finished by the end of June. It may be mentioned that the line had to be surveyed by Mr. Kocher before the order for the rails could be sent, and this work occupied some weeks. A trial run was made at the beginning of July, 1913, but the outbreak of rebellion, attended by protracted hostilities in the locality traversed by the line, prevented the formal opening of the service. The car shed was damaged during the fighting.

Nantao Tramway.—Mr. E. Kocher, under whose supervision the line was built.

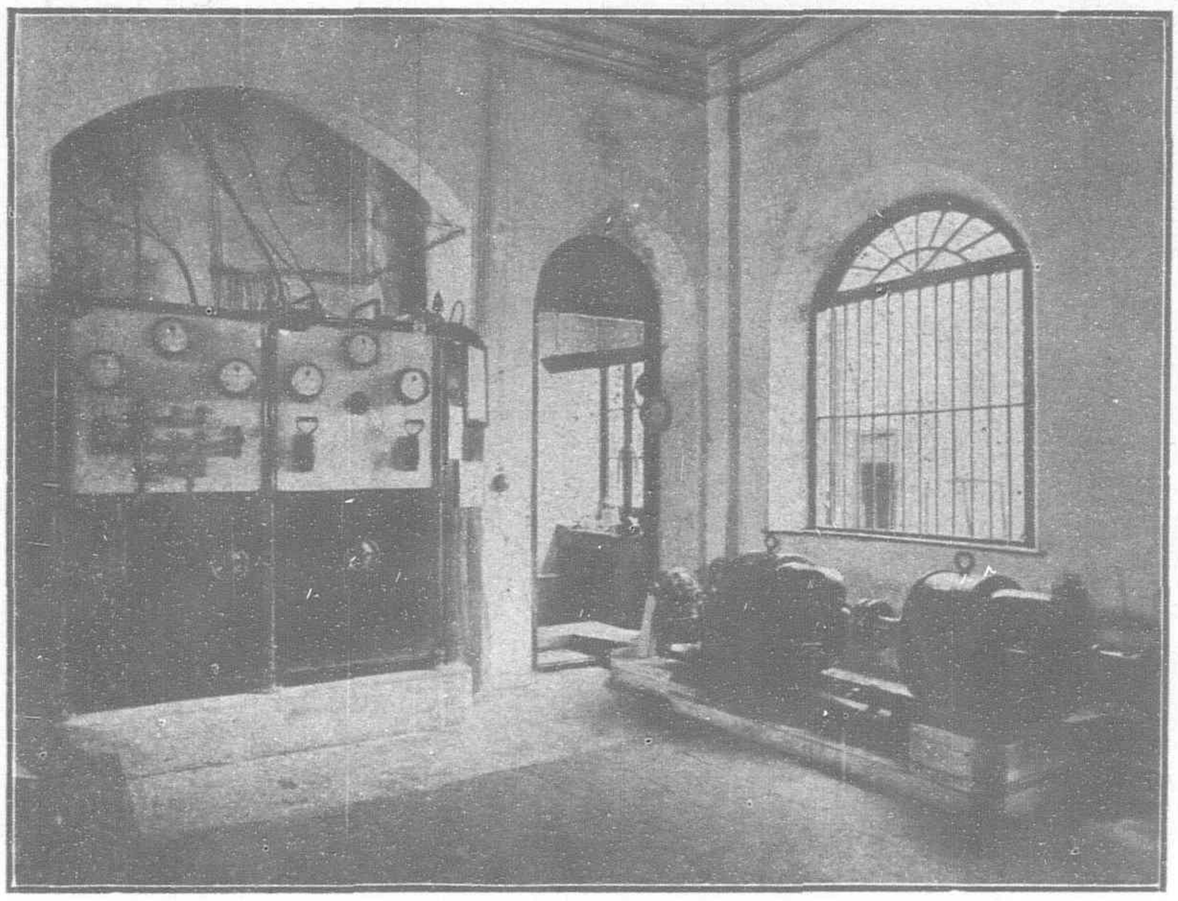


The crosses show the route of the Chinese tramway in operation. The dotted line leading from near the Shanghai-Hangchow Railway Station to Porte de l'Ouest and thence to Porte de l'Est shows the intended extension. From Port de l'Ouest to Porte de l'Est will be a double line operated by the French and Chinese companies.

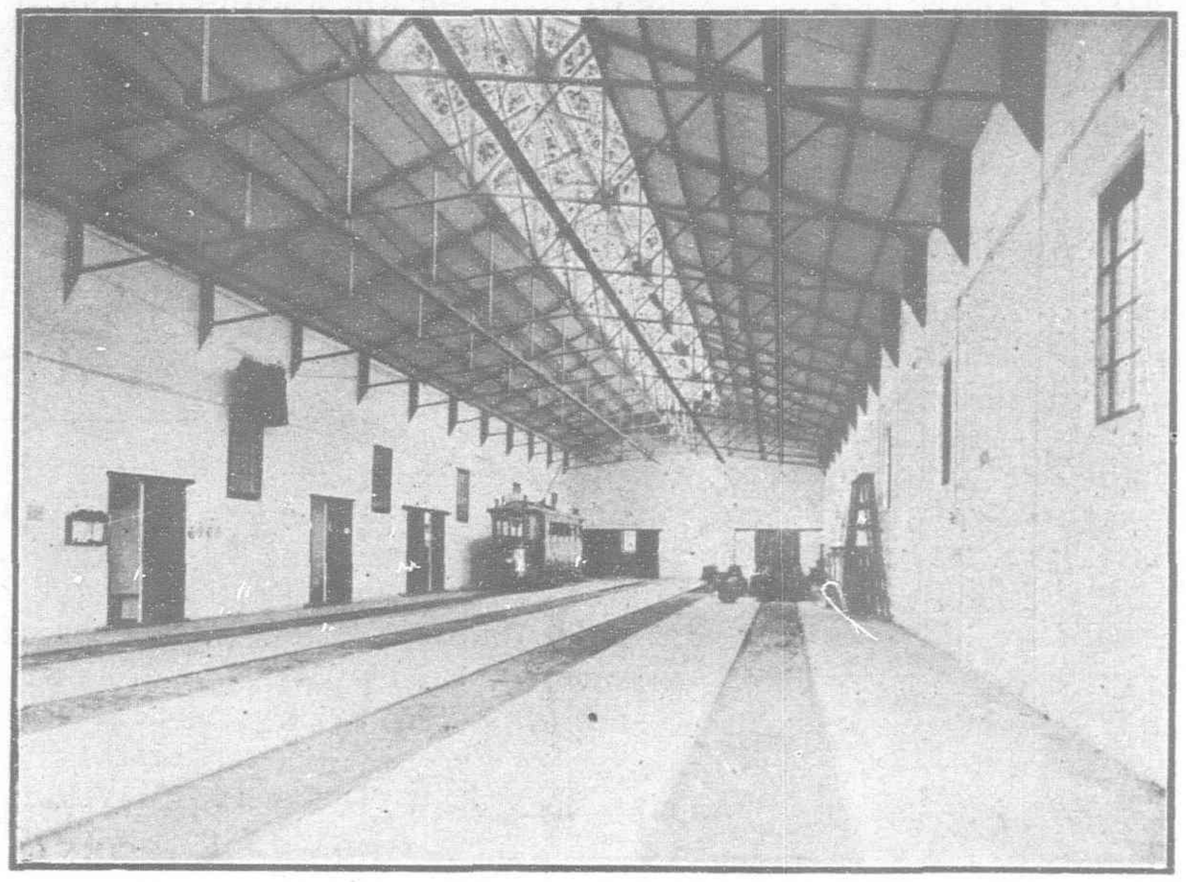
By August 11 conditions around Shanghai had improved to such an extent that the Company felt justified in formally starting the regular service.

THE RAILS

The rails were imported from Germany and were supplied by the Gutehoffnungshütte. They are fairly heavy rails of about 100 kilos per metre. The foundation for the rails was formed by digging a trench 500 m/m by 390 m/m, placing in the bottom large stones with pyramid points upwards, and over this placing



Nantao Tramway.—Booster and Switchboard.



Nantao Tramway.—Interior View of Car Shed.

smaller stones and gravel, well stamped down. This method of forming the foundation for the rails enables surface water to drain away, while providing for stability and rigidity. Each rail-joint is placed on a plate of reinforced concrete. The switches are made with two tongues as on railway tracks, a provision which lessens the shock to the passenger. Although the track was laid as before mentioned, to the Shanghai-Hangchow Railway Station, already an extension to the Arsenal has been made.

THE TROLLEY WIRES

For the overhead line there were employed two trolley wires of hard drawn copper of a cross section of about 55 square millimetres.

The trolley wire is supported by insulators suspended to steel wires, which are fastened, on the double track portion, to steel poles, and on the single track part are attached to brackets. About 900 metres from the Marché de l'Est the feeders are connected with the overhead wire going from the Power House, which is situated near the city wall. All the parts for the overhead line as well as for the car trucks came from Siemen's Bros. Dynamo Works in England.

THE CARS

The trucks for the cars were furnished by the United Electric Car Co., Ltd., of Preston, England. They are similar in character to those used in the trams in the Settlements. The motors, controllers and all the electrical equipment for the cars were furnished by Siemen's Bros. Dynamo Works.

The motors are designed for a maximum speed of 20 kilometres an hour (about 12 miles an hour), but the average speed is not more than sufficient to cover the distance between the Marché de l'Est and the Shanghai-Hangchow Railway-Station in twenty minutes.

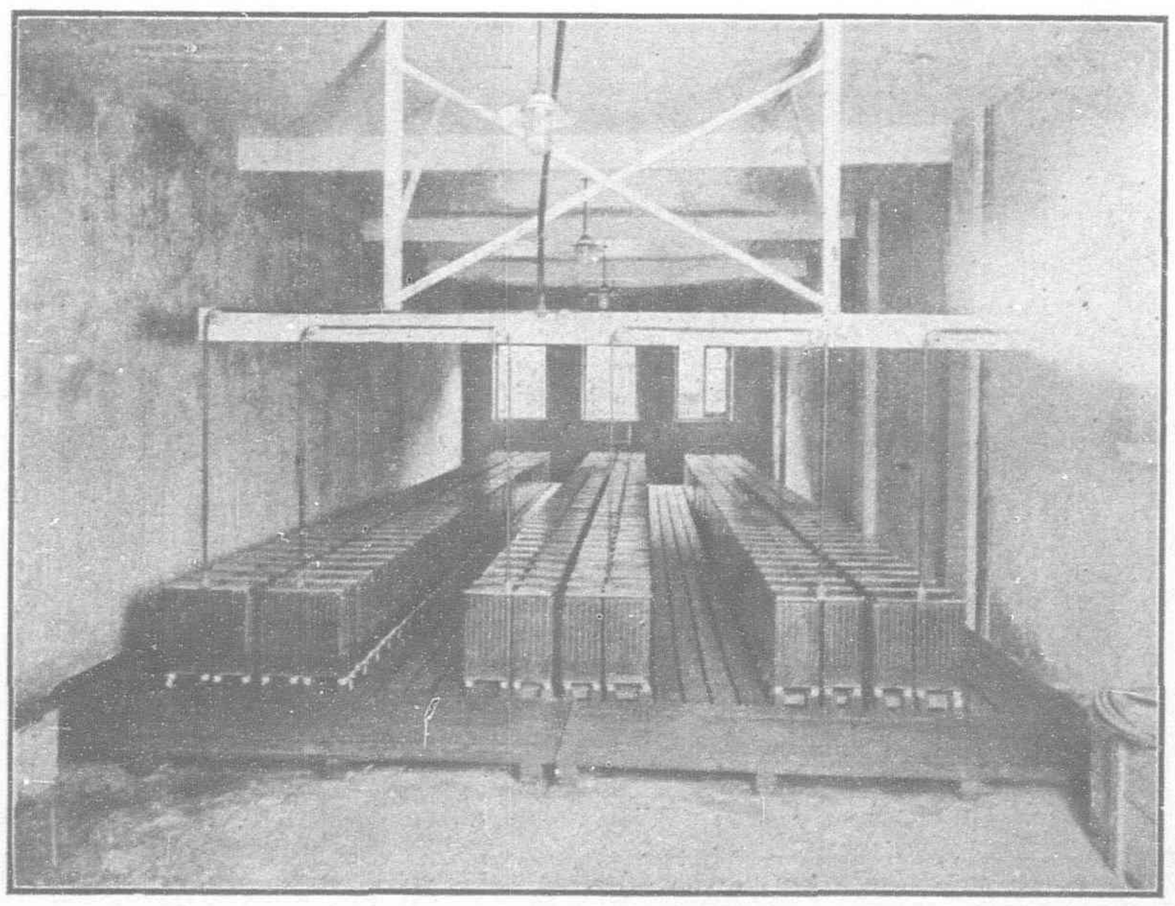
There are first and second class cars, as is the case with the French Tramway Company in the French Concession, and the car bodies are about the same. These were made locally by the Yur Sing Factory (Nicholas Tsu).

THROUGH RUNNING

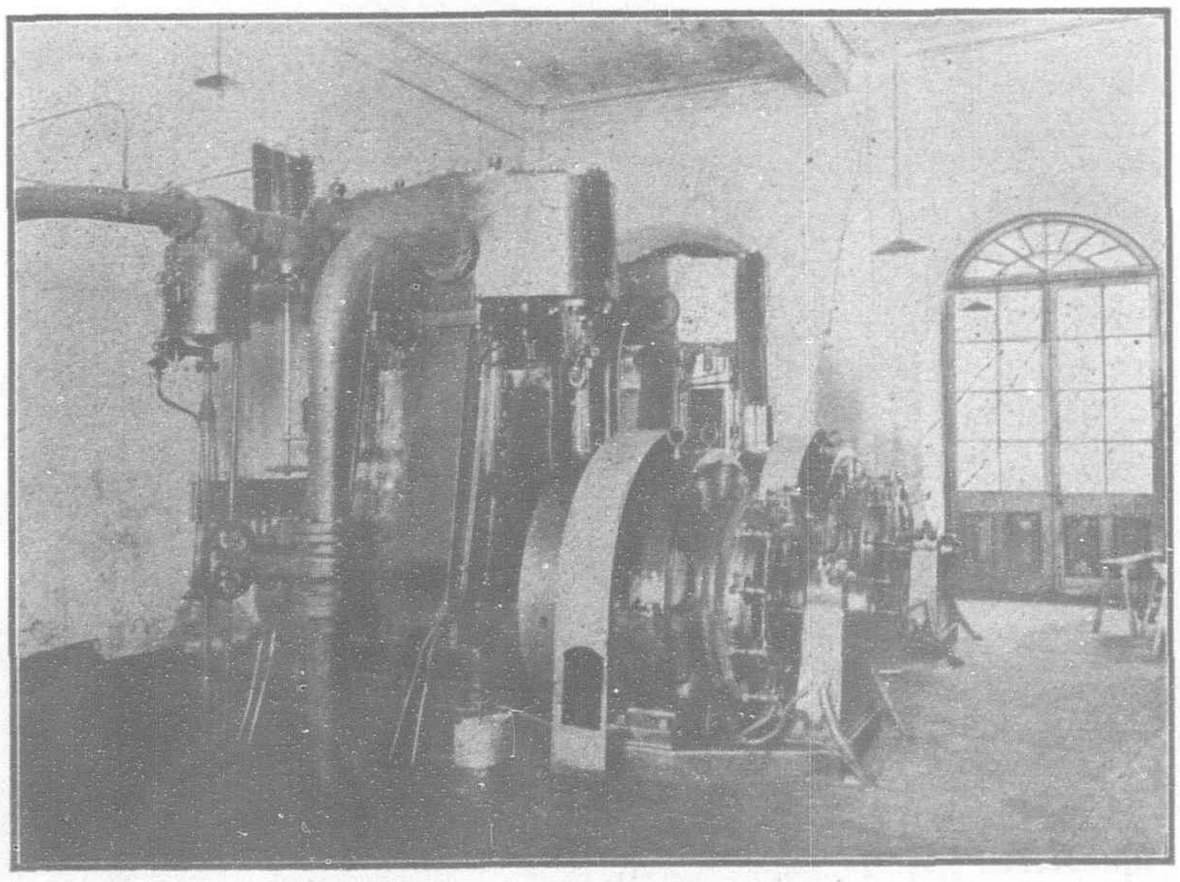
With an eye to the future, the gauge and the height of the trolley wire were made similar to what has been adopted in the French Concession and the International Settlement. This has rendered it easy to organise a through service.

CAR SHED

The car shed, which has been constructed to afford accommodation to twenty cars, is situated in front of the Shanghai-Hangchow Railway Station. It contains also an office for the traffic manager's department, repair shops, painting shops, store rooms, etc. There have now been built a large office for the managerial and clerical staffs, near the shed. The ground for the car shed is sufficiently large for the construction of



Nantao Tramway.—Accumulator Battery.



Nantao Tramway.—Steam Engines and Dynamos.

another shed of similar size and a number of other buildings. The car shed is a steel building, and was built by the Yur Sing Factory. The building was designed to give every facility for the efficient maintenance of the cars and is up-to-date in every particular.

THE POWER HOUSE

The power is supplied by the old Power Station of the Shanghai Inland Electric Light Company. It contains two engines of 100 kilowatts each, which served up to 1910 for the lighting service of this Company. In that year they were taken out of service because a new station near the Arsenal was opened. The engines were overhauled and fitted for the tramway work by adding a storage accumulator battery and booster of the Pirani-Siemens-Schükert system. The battery and the booster prevent the fluctuations of the current taken up by the cars, from influencing the dynamos and steam engines and besides that, the battery can keep the cars going for some time, in case of a breakdown of the steam engine or dynamo.

The dynamos supply a voltage of 550 volts to the trolley wire, and each engine is capable of driving from 18 to 20 train cars on the speed at which they are run at present.

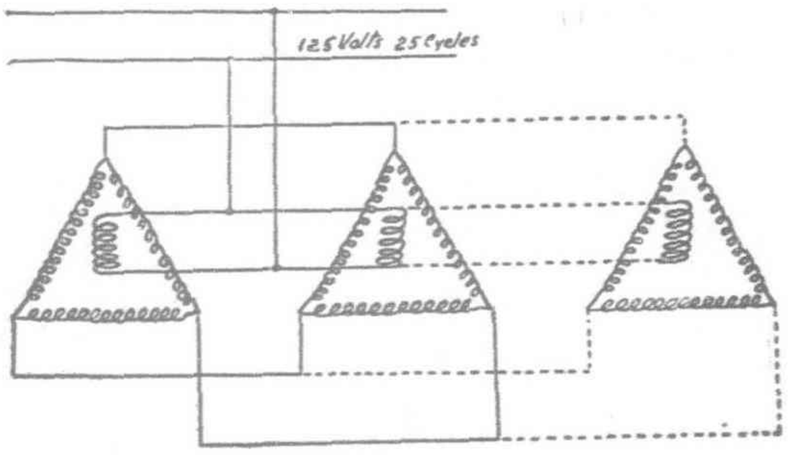
THE TRAFFIC

The traffic on the line has largely exceeded the estimates that were made originally, and the cars, especially the second class, are always crowded with passengers.

SWITCHBOARD SIGNALLING IN THE WORLD'S LARGEST POWER STATION

In the mammoth power stations of the present day, the generators are very often remote from that wonderful piece of mechanism, the modern switchboard, yet no time must be lost in transmitting instructions from the switchboard to the operator in charge of the big machines. The high standard of service maintained by the large power companies makes it imperative that the signal system for transmitting such instructions be so reliable that the probability of an error is eliminated.

In the world's largest power house, the Keokuk generating station of the Mississippi River Power Company, it is more than 800 feet or nearly one-sixth of a mile from the switchboard to the most remote generator and no part of the generator room is visible from the switchboard owing to the fact that the latter is installed in an upper story. For this reason, no efforts were spared to make the signal system as dependable as possible.



Diagrammatic representation of motor connections.

Transmitters and receivers are installed on each benchboard, the number corresponding to that of the generators controlled by it and also one receiver and transmitter is placed beside each generating unit. The left hand dial of each switchboard set is the transmitter, while the upper dial of the pedestal set is the corresponding receiver at the generator. The lower dial of the pedestal set is the generator attendant's transmitter, while the right dial in the switchboard set is the corresponding receiver.

The transmitter of the switchboard set is operated by means of a handle, pointer, and dial mounted on the front of the benchboard and concentric with the hand wheel which operates the field rheostat of the corresponding generator, the motion which sets the pointer of the transmitter at whatever signal it may be desired to transmit being communicated to the transmitter by means of a cable and pulley arrangement. the pointer of the corresponding receiver in the generator room instantly points to the same signal.

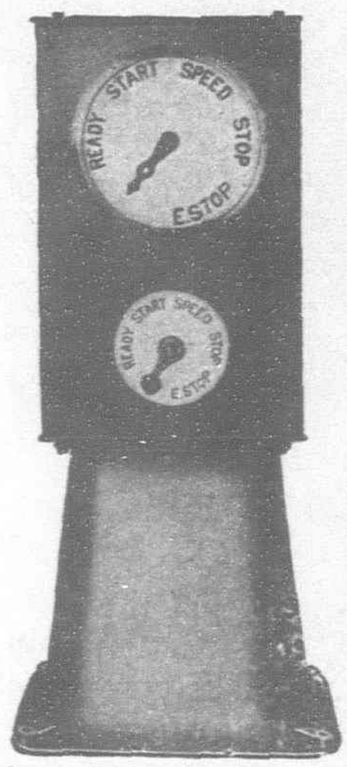
The synchronous motion of the pointers of the transmitter and receiver is secured by means of small induction motors each provided with a three phase delta connected stator winding and a single phase rotor winding of the shuttle type, the windings being exactly alike in all the machines, and corresponding dials having their signals at exactly the same points with respect to the winding.

Motors for corresponding transmitters and receivers have their stator windings connected in multiple, but not excited except by induction from the rotor winding. The rotors are also connected in multiple and excited from a single phase source. With two motors connected thus, any motion of the rotor of one is accompanied by a corresponding motion of the rotor of the other. Thus each will always bear the same relative position to its stator winding So, in sending signals, the rotor of the transmitter is turned so that the hand pointer on the dial points to the signal it is desired to send and the rotor of the connected machine or machines instantly moves around so that the hand on the dial of the receiver also points to the same signal.

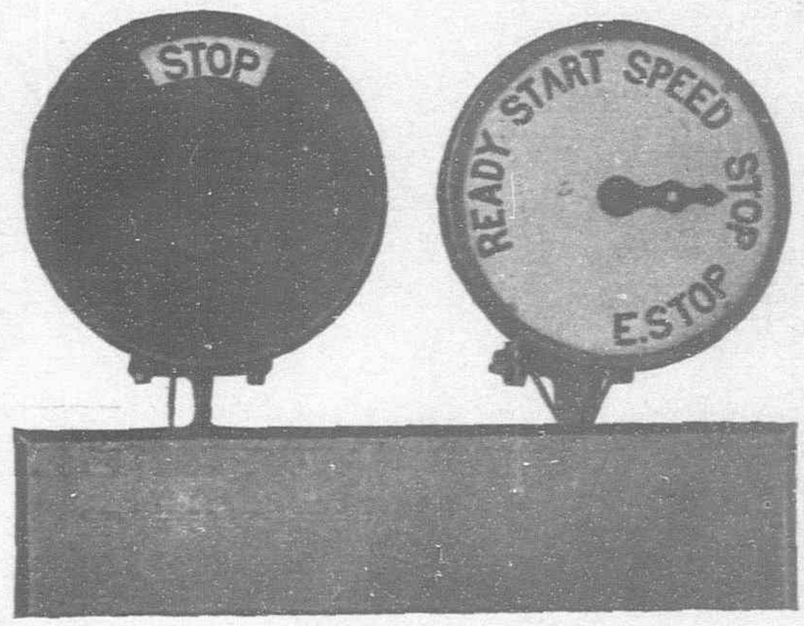
The rotors are excited from a 25 cycle, 125 volt circuit with provisions for automatically throwing them across an auxiliary supply circuit in case of failure of the main source of supply.

Double push button switches are located on both sides of the transmission handles, and serve to operate signal lamps, whistles and bells.

To send a signal, the switchboard operator turns the handle to the signal he wishes to send, this action moving the pointer on the dial of the transmitter, and, consequently, the pointer on the dial of the receiver at the generator stand, so that they both point to this signal. He then pushes a button on the right of the transmitting handle, thus lighting a lamp on the generator whose operator is being signalled to and also blowing a whistle to attract his attention.



Transmitter and receiver at generator.



Transmitter and receiver for mounting on benchboard in switchboard room.

As soon as the operator at the machine has read the signal, he turns the handle of his transmitter to the same signal, thus transmitting the signal he has received back to the switchboard operator as a check. Then he presses the button at the right of his transmitting handle, thus extinguishing the lamp and cutting out the whistle; after which he presses the button at the left of the handle so as to light a lamp in the switchboard room and ring a bell there to attract the attention of the switchboard operator, who, after checking the signal, presses the button at the left of the transmitter handle extinguishing the lamp and cutting out the bell.

This completes the sending and checking of a signal.

The devices for sending checking signals as outlined above were manufactured by the General Electric Company, Schenectady, N. Y.

MOTOR CAR SERVICE IN SOUTH MANCHURIA.

A group of Japanese residents at Pulantien are planning to form a company to start a motor car service between Pulantien and Pitsuwo. The company is to be capitalized at Y20,000 in shares of Y50 each to be paid in quarterly instalments. The departures from each end will be twice daily, the accommodating capacity of the motor car being 16, A journey between the two places can be completed in two hours.

SUMMER TRAIN RATES IN CHINA

Special Excursion Rates are now in operation over the following Railway Lines mentioned below. On the Tientsin-Pukow Railway 25 per cent. reduction on single journey rates; available till September 30. On the Peking-Mukden Line reduction tickets issued at one fare and a third to Peitaiho, Tangho and Shanhaikwan, rates available till September 30 for return at any time up to October 31. On the Shantung Railway from Tsinanfu to Tsingtau, return tickets are issued at a reduction of 25 per cent. on the Single Fares, rates being available up to September 30 Tickets can be obtained from Messrs. Thos. Cook and Son.

THE HWAI RIVER CONSERVANCY COMMISSION

On December 27, 1913, a Presidential Mandate established the National Irrigation and Water Conservation Bureau of China, with Mr. Chang Chien, Minister of Agriculture and Commerce, as its head. This was in response to a memorial from Mr. Hsiung Hsi-iing (then Premier) and Mr. Chang Chien pointing out the necessity of properly investigating and dealing with the irrigation and conservation problems with which the Government was constantly confronted. Events then began to move quickly. On January 30, 1914, a preliminary agreement was signed by the Chinese Government and the American Minister at Peking by which the American National Red Cross consented to take steps to secure the flotation of a Hwai River Conservancy Loan of $20,000,000 U.S. Currency at 5 per cent., or such sum as was found necessary after complete surveys had been made.

Soon after this agreement was signed Mr. C. D. Jameson, who in 1912 prepared a comprehensive report on the Hwai River district for the Red Cross,* ieft China to put the scheme before the American authorities. The American Red Cross, not being a business organization, could not itself undertake the actual financing and engineering work, but it recommended the eminent firm of Messrs. J. G. White and Co. of New York and London.

In the meantime in accordance with the preliminary agreement, the position of Engineer-in-Chief and Chairman of the American Red Cross Board of Engineers on Chinese Conservancy, was offered to and accepted by Colonel Wiiliam L. Sibert. A brief sketch of Colonel Sibert's distinguished career appeared in our last issue. The other members of the Board were appointed: Mr. Arthur P. Davis, Chief Engineer of the United States Reclamation Service and Professor D. W. Meade of the Wisconsin University and a member of the Ohio Flood Commission. Mr. C. D. Jameson occupies the post of General Adviser to the Board and Mr. L. D. Cornish is the Principal Assistant Engineer to the Board. The gentlemen mentioned and surveyors (including Mr. S. T. Suen a Chinese engineer of the University of Wisconsin) arrived in Shanghai on June 28 and at once set about making arrangements for an immediate start of the survey of the Hwai River district.

The plan of operations is for the party to visit first Hanchwang on the Grand Canal. Three months are to be spent on the survey, the work being carried on by two parties of surveyors, each being apportioned a certain area.

Upon the report that Colonel Sibert makes after the surveys are completed will depend whether the work is started without delay, and its scope. Those who know the awful misery that has been caused in the immense area periodically swept by floods, will hope that this Board, composed of the most distinguished representatives of American Conservancy Engineers, will be able to recommend the carrying out of a scheme that will be of incalculable benefit to China.

* This report was published in the FAR EASTERN REVIEW of November, 1912.

KALGAN-SUIYUAN EXTENSION

Before this issue is out of the press it is likely that the large bridge carrying the railway now in course of construction from Kalgan to Suiyuan over the Yi river at Tatungfu will be completed and open for traffic. The extension is, at present, in operation to the river side, and active traffic is being carried on between that point and Kalgan. With the opening of the bridge trains will cross the river; and the station now in course of construction near Tatung city will be the present terminal. Work is, at present, being carried on to extend the line to Fengchen, 27 miles due north of Tatungfu. The road follows the river valley practically to Fengchen, and the work is mostly side cuts. There will be no tunnelling, and an easy grade will be obtainable.

At the beginning of the next year it is hoped to commence work on another section to the city of Pengtechuan. The work on this section will be somewhat difficult rock cuts, but a fair grade will be maintained.

As soon as money is available the line will be pushed on to Suiyuan, about 120 miles, and thence a further 110 miles southwards to Paotow on the Yellow River. When this line is completed it will open up large extent of territory and secure the trade which comes down the Yellow River from the Langchow region. The Ministry of Communications has given consent to a foreign loan being raised to carry out this work.

OIL STRIKE AT AKITA, JAPAN

On May 25th an important strike of oil was made at Kurokawa Akita-gori, Akita Prefecture, Japan. Work was begun on the new well early last April by the Nippon Oil Company with one of the company's up-to-date rotary boring machines. After drilling through ordinary earth and rock, to a depth of some 1,110 feet, a strata, known to oil experts as "the shell" was encountered. At midnight of May 25, the drill pierced through this shell, or crust, at a depth of 1,368 feet, into what is apparently the lead-bed of an extraordinary deposit. It is from this bed that the unusual flow continues. What is most extraordinary, is the fact that the other five wells of the company in the district, which heretofore required suction pumps, also began flowing of their own accord. But the flow was so steady, and being unattended by any extraordinary force, was easily controlled. Even the flow of the new well can be controlled at any time, as it flows in a steady stream. The new well was sunk with an eight inch casing, which has been capped with a four-way head, thereby controlling the flow. The output was at first somewhat difficult to handle, as no provision had been made for such an unusual quantity. The sump at the top of the hill which had been constructed to receive the flow was soon filled and the overflow was conducted down into the upper-level paddy fields, where many hands erected a dyke around the outside of several *cho*, thus forming a very large sump.

HUGE OVERFLOW

This, however, was soon filled and the overflow was again conducted down into valley below, where another large sump was hastily constructed, enclosing several paddy fields. Four or five other sumps were then constructed on this lower level, into which the flow was directed. By means of the four-way cap, the output was reduced from 480,000 to 120,000 gallons per twenty four hour. In the meantime, the other five wells, owing to want of labor to control them, have been checked entirely. From the time of the opening of the well until the four-way cap was in place, the output was about 480,000 gallons per twenty-four hours.

NO PANIC

"Of course," remarked Mr. K. Ito, Superintendent of the Investigation Department of the Nippon Oil Company, to an interviewer "this very fortunate production will, more or less, effect the other companies in Japan but our company does not intend to create any panic in price reductions. Naturally, we intend utilizing the output to our best advantage, but do not intend flooding the marked. Nor do we intend enlarging our refineries, for the present at least- The Imperial Navy as well as the Imperial Railways are in need of oil for fuel, and this discovery fills a long felt want. Therefore, we not only consider it a good fortune to the company, but a very valuable asset to the nation as well. It is the intention of the company to dispose of the greater part of the production in the crude state, refining only that quantity which may be conveniently handled by our refineries at Tsuchizaki.

"We have no idea as to the extent of the lead-bed, but both Mr. Harrison and Mr. Wheat, who came with me from America in March, last year, and were engaged by the company as experts, are of the opinion that the flow is from a bed or lead-sand, and will continue for an unlimited length of time.

UNUSUAL SCENES

"The Company is now employing about 1,000 extra laborers and every effort is being made to secure the output. The paddy fields which are being rapidly transformed into sumps, are not of such a nature as to permit of leakage, and are therefore safe repository-tanks.

"That which struck me as being the most notable feature of the whole was the river of crude oil rushing down through the hillocks to the valley below. The capping of the eight inch casing of the well was also a scene somewhat unusual in the oil industry of this country."

THE FAR EASTERN REVIEW

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THE NEW MINISTER OF COMMUNICATIONS

When Hercules made up his mind to cleanse the Augean stables he was confronted with a task scarcely more difficult than that which has to be tackled by any one inspired with a desire to reorganise the railway affairs of China, and Hercules had the distinct advantage of being able to bend to his purpose the waters of the Alphaeus and Peneus. No such potent streams lie near the hand of the worker in Peking. Nor has he but the stalls of 3000 unresisting oxen to deal with. He has to dislodge a system which has grown in vigor with the years and which has struck its roots deep into the fertile soil of nepotism, a system which will be defended by passive resistance if by no forceful means by thousands who have lived to believe that the Ministry and all its avenues of wealth production are primarily for the good of the individuals fortunate enough to have secured a hold upon it, and only secondarily for the benefit of the State. That this condition is one of extreme gravity and of growing danger in view of the rapid expansion of the railway system is realised fully by President Yuan Shih-kai, and he is determined to effect a reorganisation before it is too late.

The changes recently brought about in the administrative systems of the provinces and the Capital—and which are dealt with elsewhere in this issue—enable the President to pay direct attention to the organs through which that administration is conducted, and while plans have been made to reorganise all the Ministries the one upon which particular interest is centred is that of Communications. In general the control of the Ministries will be changed from the present system to that which existed during the old regime. That is to say in each Board there will be a President, two Vice-Presidents, several councillors, heads of various departments, and the usual staff of secretaries. Until recently there was one Minister, one vice-Minister and, in the Board of Communications, two Directors-General, one in charge of telegraphs and one in charge of railways—the last functionary being the most powerful by virtue of his control of all the strings in the institution with which he was connected. There were also councillors, and, of course, the working staff. It is felt by the President that the old style has many advantages. Its revival will, particularly, enable him to make some sweeping changes which he would find it difficult to effect if he retained the present system, and above all it will give him the opportunity to break down a centralisation of power in an individual two or three grades lower than the Minister and replace it in the hands of the highest Official in the Board, to wit the Minister himself.

More public attention is directed to the reorganisation of the Ministry of Communications, of course, because it is the principal earning department in the control of the Government. The native press who are antagonistic to one section in the Board have exhibited an almost frantic delight in chronicling the changes that have been rung already or which are contemplated, and some newspapers have entered upon a veritable campaign of denunciation of the people whom they claim to be the leaders of the Chaotung or "railway party," Nor are they stinting in their praise of Mr. Liang Tun-yen, the official upon whom the onerous task of reorganising the Ministry has fallen.

Mr. Liang, at the urgent request of the President, came out of a retirement which has lasted from before the Revolution—when he was compelled by bad health to relinquish the Presidency of the Board of Foreign Affairs and the post of Controller-General of Revenue—to undertake the task of reorganisation which President Yuan Shih-kai desires to see carried out. He has accepted a difficult and onerous position which imposes upon him tremendous labor and the necessity of constant application in the unravelling of the numerous perplexities which are said to exist for the uninitiated in the methods which have existed in managing the railway affairs of the country. But he enters upon his work filled with optimism, and staunch in the belief that honesty of purpose will pull him through. Honesty and Integrity constitute his watchword, and his aim will be so to arrange matters that China will reap the fullest advantage from her railways.

Consistent with the desires of the President Mr. Liang has commenced the reorganisation by abolishing the Director-Generalship, and by the appointment of two Vice-Presidents, one of whom is the late Director-General of Railways, Mr. Yi Kung-cho, and the other Dr. Mark who relinquished his position as Manager of the China Merchants agency at Tientsin to accept the post. The railway work which has hitherto fallen to the Director-General will henceforth be divided into different departments such as accounts, operation, maintenance, rolling stock etc. These departments will be under special heads who will be directly responsible to the Minister. Reorganisation along these lines has already commenced and at present the Minister is endeavoring to find desirable officials to assist him in his work. That he will meet with obstacles he knows, but that he will overcome them he is certain, his faith being in the prevailing belief that honesty must eventually win the day.

Mr. Liang comes to his task well armed with knowledge and experience. His scholarly attainments in Chinese as well as in foreign learning are strongly backed up by an intimate understanding of provincial conditions and administrative needs, and these are fortified by his confidence of success. As one of the first group of Chinese who went to America in 1871 to study he entered Yale University, but before he could graduate he, with the others, was recalled in 1882 to China, though the University has since conferred upon him the degree of LL.D. and B.A. Upon his return to China Mr. Liang took up a position in the Telegraph Department at Tientsin, and during the war with France he resigned and went south, where he ultimately joined the service of the late and distinguished Viceroy Chang Chih-tung, with whom he served in the Telegraph department and as assistant to the Commisioner of Foreign Affairs. When Viceroy Chang was transferred to Hankow in August 1889 Mr. Liang Tun-yen went with him, taking up the control of the Telegraphs there and assisting with foreign affairs. This long service with the old Viceroy was of great educational value to Mr. Liang so far as Chinese was concerned, Chang Chih-tung being an eminent man of letters and the wielder of a facile and powerful pen The service, however, taxed his strength to the utmost for the Viceroy was a hard taskmaster, having no regular hours for work, performing whatever duties he had to accomplish after the day was done whenever he woke from sleep, whether it be before midnight or any hour after that to daylight. At all times he expected his assistants to be at his service, the result being that the health of many including that of Mr. Liang, became seriously affected. At the time when the Viceroy was transferred to Nanking in 1902, Mr. Liang again accompanied him, and while there was the responsible negotiator for a large foreign loan. This was his first experience in this field of work, and having set his face against commissions he refused what used to be regarded as the legitimate result of such operations, an act which was rewarded by the reduction of his salary, when he returned to Hankow in 1903, by Taels 30 per month.

With other returned students Mr. Liang suffered as a result of the policy of the old Viceroy not to give men educated abroad official rank, and it was not till the Viceroy was called to Peking in June, 1903, that he had a chance of emerging from the comparative obscurity in which he had so long labored. The advent of the late Viceroy Tuan-fang as acting Viceroy at Hankow enabled Mr. Liang to take official rank, and he was, in October, 1903, appointed Customs Taotai at Hankow, being transferred to a similar post at Tientsin in 1904 in succession of Mr. Tang Shao-yi, who was sent on a special mission to India. Sometime later he was called to Peking and in May, 1907, he was appointed Minister to America, but did not proceed, being given, in September of the same year, the post of acting Junior Vice-President of the Board of Foreign Affairs, a position which was made substantive in July, 1908. In January, 1909, he became acting President of the Board, and within a few weeks was given the substantive post, being made, in addition, the Controller-General of the Revenue Council in March, 1910. While President of the Board of Foreign Affairs it was his duty to negotiate the loan for the building of the Tientsin-Pukow railway, and he has the distinction of creating what are known as the "Tientsin-Pukow terms," a set of conditions bettering those under which China had previously floated railway loans, and giving to the Chinese larger powers over the finances and management of the railway.

The strain which constant employment and energetic pursuit of the best interests of China had caused to the health of Mr. Liang told so much upon him that he was compelled to seek relief from active work, and in July, 1910, the Throne gave its consent to his retirement. The revolution breaking out in October, 1911, Mr. Liang sought rest and recovery abroad, remaining away from China until a few months ago when he returned upon the urgent request of President Yuan Shih-kai, the post he now occupies being the first he has taken since his retirement.

The stay abroad restored Mr. Liang to health, but he has returned to resume an arduous work which might well tax it again. He has always stood for honesty in officials, and has in the handling of finances exhibited an integrity and uprightness which has puzzled many and irritated not a few. Knowing his calibre in this direction, his talents as a scholar, and his long experience under so able a Viceroy as Chang Chih-tung, President Yuan Shih-kai insisted upon him coming back into harness, and prevailed upon him to take up the most difficult post that calls for reorganisation. And at the outset Mr. Liang began to apply himself in his old vigorous way; demands of those about him upright effort, loyalty to the country, and strictly honest service; and if he secures that he will place the railway affairs of China upon a sound and business-like footing. Everything depends upon his health and strength. If his constitution will hold out he is convinced that he will triumph in the Herculean task he has ahead of him, and which is at present being watched with so much interest by all sections in Peking in particular and the country in general.

THE SINO-BELGIAN COMPANY

Belgian finance continues to be active in China. Apart from the interests taken in various railways and some industries a combination has now been effected with certain Chinese to develop the natural resources along the railway lines recently secured by Franco-Belgian capital. Those lines are, of course, the ones which have been the cause of much controversy of late, to wit, the one running from the sea across China to Kansu province, and the one from Tatung, in the North of Shansi Province, to Tungkwan and on to Chengtu, the capital of Szechuan Province. The actual extent of the arrangement made with the Chinese is not yet known, the parties maintaining what secrecy they are able to. However, it is said that the capital is to be £10,000,000 subscribed equally by Chinese and Belgians, the latter providing the moiety of the former since they are unable themselves at this juncture to supply it. Reports have it that the Company is to develop whatever mines are available; and enjoys the privilege of establishing any other industry that may seem advisable to those concerned. It is said that the arrangement does not in any way limit the areas which may be included in the sphere of operations of the concern.

This understanding is one of several into which the Chinese have recently entered. Up to a very little time ago the Chinese exhibited great reluctance to co-operate with foreigners in the development of their resources, and in cases where they were willing to negotiate they claimed equal control or full control over the affairs of the concern in which they were interested. It would seem, however, that the old prejudices are dying a natural death, and if such is the case China stands to benefit, her people having neither the money nor the experience wherewith to undertake the vast operations which will be entailed in the effective opening of the resources of the country to the use of mankind. Certainly the officials appear to have awakened to the many benefits derivable from the exploitation of China's mineral wealth, and they are apparently sagacious enough to see that China cannot of her own accord do anything tangible in this respect. It is to be hoped that all Chinese will rapidly learn to appreciate what the employment of the surplus population will mean. In the avenue of industrial effort will be found large

scope for the employment of labour; likewise it will be discovered that therein lies the secret of wealth which will enable the people to prosper and the Government to secure an abundant revenue.

A few object lessons in the shape of the establishment of well equipped and systematically conducted enterprises should be sufficient to do away with whatever prejudice may remain in the public mind. China suffers to-day because she is solely an agricultural country, but in those places where there has been impact with foreign methods the people have exhibited a remarkable aptitude in the acquirement of the knowledge necessary to handle mechanical inventions. If this can be taken as a criterion it is safe to say that China will provide in the future one of the best artisan classes to be found in the world; and this is one of the strongest inducements to foreign capitalists to venture upon the establishment of large industrial concerns. The fillip that has been given to the promotion of various enterprises bids fair to place relations between Chinese and foreigners upon a basis different from that obtaining in the past, and as consistent advocates of the adoption of a wider outlook by China we trust that the results will be highly beneficial to the country. Once the Chinese can persuade themselves to realise that they have not the requisite knowledge or experience to conduct large industrial institutions and that they must rely upon the application of foreign control, China will be on the high way to a development which will provide for her a future which has been pictured by numerous fluent pens and heralded by many eloquent friends and sympathisers.

OIL PRODUCTION IN JAPAN

Much interest is naturally being taken in the sensational strike of oil in the Nippon Oil Company's fields in the Minami-Akita district, Akita Prefecture, Japan. According to well authenticated reports the main well began to produce 390,000 gallons per day after the strike, which rose in two days to 468,000 gallons. As the yield of Japanese oil has hitherto not exceeded 195,000 gallons per day, the great importance of this new development will be readily seen. Hitherto Japan has not been able to supply her own oil-needs and has imported half the annual quantity consumed. If the present output can be maintained, and it is stated that experts are of opinion that it will be, Japan at one stride will advance from the position of a purchaser to that of a seller. It is too soon yet to appraise with accuracy the precise economic value of the development, but it is evident that it will be considerable and far-reaching in its effects.

Apart from the economic value of the strike, it is of the greatest importance from a military point of view. The increasing employment of oil as a generator of power for the propulsion of war-craft has led to the naval Powers scouring the world for new sources of supply. Great Britain only recently appropriated £2,000,000 to secure supplies from the oil-fields of Persia and it is common knowledge that that country has been endeavouring to obtain control of fields in Central and South America. Japan, like Great Britain, has hitherto been compelled to face the possibility of being dependent upon purchased supplies, but she will now be able to regard any abnormal development in the use of oil instead of coal on war-craft with equanimity.

SUBSIDIARY COINAGE IN CHINA

The main obstacle to a development of China's import and export trade has been the unrest left as a legacy of the revolution, and the consequent disinclination of traders to do business except on a strictly cash basis. But the fact must not be lost sight of that the deplorable condition of the subsidiary coinage acts in a great measure as a restraint of trade; an influence that will become still more marked as business expands. It is true that in major operations subsidiary coins do not enter into direct calculation, but in the interior, where big silver money is practically unknown, goods are bought with and sold for the depreciated local subsidiary coins. This being so it follows that this depreciation has to be taken into account when the original transactions on a large scale are made, and consequently that the constantly increasing depreciation in the value of the subsidiary coins is a matter of the first importance to the foreign importer and manufacturer. The position has been growing steadily worse and there is no indication that an improvement can be expected in the near future. Figures quoted by the chairman of the Shanghai Electric Construction Company, which operates the trams in the International Settlement of Shanghai, at a recent meeting, which are quoted in an article elsewhere in this issue, show plainly and strikingly the effect of the depreciation upon the returns of a concern which is compelled by the nature of its business to accept subsidiary coins in payment for its services. This company loses over 25 per cent. of its revenue in the process of transforming the subsidiary coins received on the trams into money that will be accepted by the banks.

In these circumstances many will feel regret that the Chinese Government talks of postponing the flotation of a loan for the purpose of putting the currency of the country on a proper basis. The motive animating the Government is undoubtedly good, but, while it is commendable to seek to prevent the burden of debt becoming unduly heavy, it may be doubted whether it is the highest wisdom to abstain from borrowing to bring into operation a regenerating influence that would be felt beneficially throughout the country. A sound currency may be said to be the basis of prosperity; at least it is evident that there can be no wide-spread prosperity when the value of the circulating medium is an unstable quantity. A reform of the currency is a matter of such extreme importance that it should be undertaken without loss of time and any indebtedness involved would be more than justified by the benefits immediate and prospective.

THE PANAMA-PACIFIC EXPOSITION.

All reports from San Francisco go to prove that the work in connection with the great Exhibition that is to open next year is being pushed on with remarkable rapidity. It has become a commonplace that exhibitions are never in a complete condition upon the day of official opening, but San Francisco is determined to show that even the greatest exhibition that has ever been held—as this will be in many ways—can be completed within scheduled time. Recent photographs, which show the Wonder City in an advanced state of development, suggest that perhaps San Francisco is not unduly sanguine.

An interesting paragraph elsewhere gives some information in regard to the exhibit that is to be made by the United States Steel Corporation and its subsidiary companies. As might have been expected the Corporation intends its exhibit to be most comprehensive. Going right back to the ore fields it will cover the mining, transportation, all intermediate processes and then steel manufacturing in its various lines. An exhibit of this kind will be of enormous value as well as interest, as increased knowledge of the greatest of all industries is likely to induce a more tolerant consideration of the problems it has to face. In these times when it has become fashionable to see in all great organizations such as the Steel Corporation a mighty power for evil, it will be instructive for the public to learn the many ways in which the Corporation looks after the safety and the material and moral well-being of its employees. This is an avenue of activity along which the Steel Corporation has proceeded far and we understand that particularly graphic exhibits are to be shown at the Exposition in this connection.

Development of a skilled staff for its new enterprises has been taken in hand by the Standard Oil Company, and many of the graduates of technical schools have been engaged to take a summer course in business and instruction, after which they will be sent to China on a contract at a very satisfactory salary. The opportunity is one which adventurous young men would naturally grasp at, and the chances for achievement somewhat parallel those on our own frontiers of some decades ago.—*Mining and Scientific Press.*

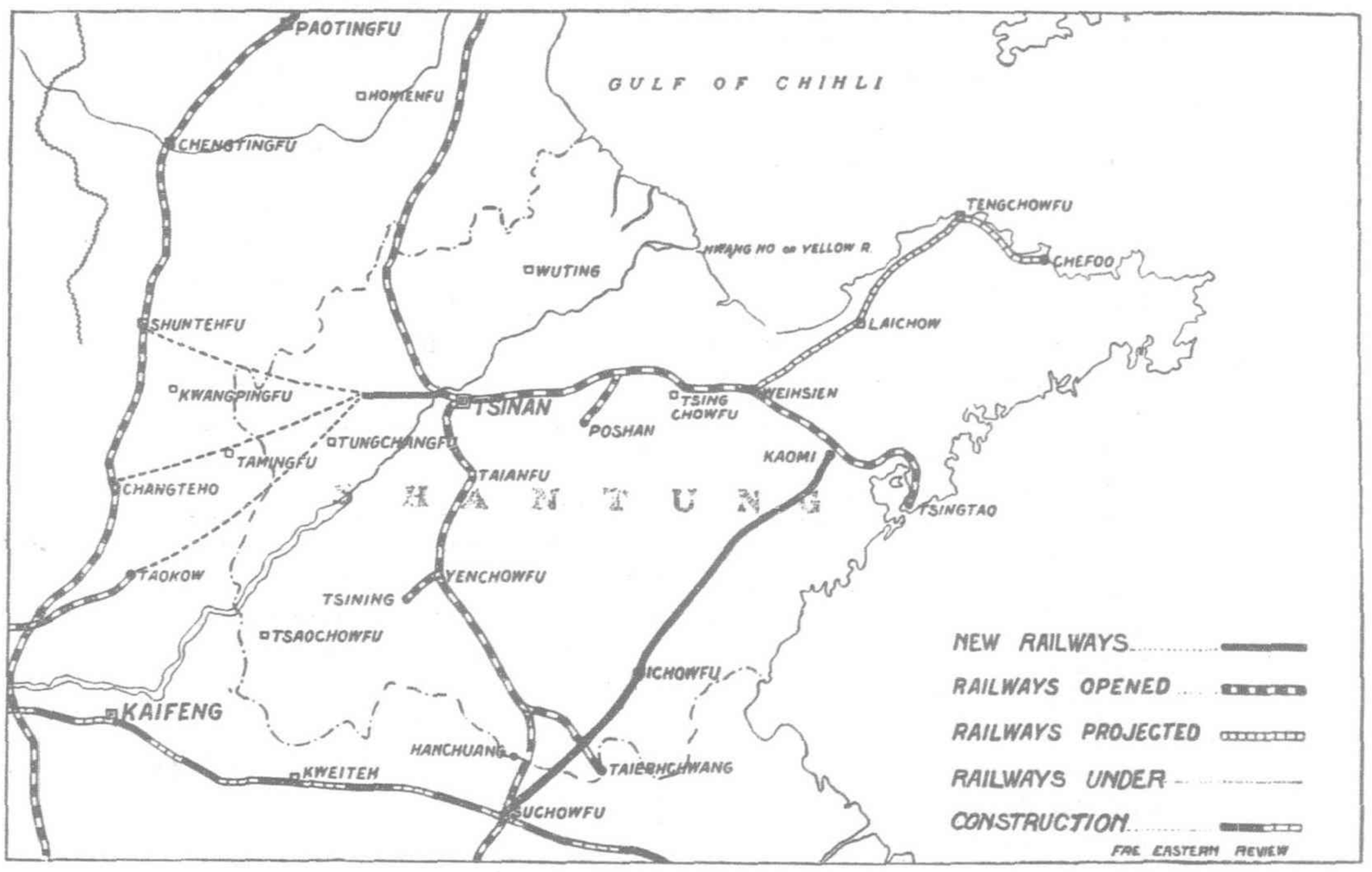
NEW RAILWAYS FOR SHANTUNG.

On December 31, 1914, a preliminary agreement was signed between China and Germany for the construction of two new railways in Shantung province, one from Kaomi, west of Tsingtao, to Ichowfu and Hanchuang, on the railway line connecting Pukow with Tientsin, and the other from Tsinanfu to some point on the Peking-Hankow railway. In the final agreement the line from Kaomi was to run to Hsuchowful and to form a junction with the Tientsin-Pukow Railway.

Under the Kiaochow Convention of March 6, 1898, China conceded Germany the right to build railways in Shantung under German Company laws, and while the railway from the port of Tsingtao to Tsinanfu was so constructed, Germany decided not to follow the same practice in the future, agreeing to forego the privileges in that direction and permitting China to build the lines upon conditions similar to those under which other railways have been constructed.

When the preliminary agreement was signed in December last this change was given effect to, and during recent months negotiations have been proceeding with regard to a final agreement to have work carried out on the railways mentioned.

The final agreement, which was signed on June 24, stipulates that China shall raise a loan in Germany for the necessary money. The loan agreement has not yet been signed, but it is understood that it will grant a commission of five per cent. on all the materials purchased, or a higher sum if such be granted to others. This condition for a purchasing commission follows the precedent set elsewhere in China.



The dotted lines from a point west of Tsinan show the three originally proposed routes to connect with the Peking-Hankow Railway. That to Shuntefu has now been definitely abandoned.

The Chief, and other engineers, will be Germans, and the Accountant staff will likewise be under the control of German experts.

When the lines are completed they will be handed over to the Ministry of Communications for operation, the control, of course, being in the hands of Germans until the loan is repaid.

The line to be built from a point on the railway west of Tsinanfu has not yet been settled as to route, and that will not be decided until after a survey has been made of the country between the Yellow River and Changteho, and Taokow, the present terminus of the Peking Syndicate railway. The final selection will of course bring about a connection between the Peking-Hankow railway and the line running to the port of Tsingtao. The idea of connecting Tsinanfu and Shuntehfu, has been abandoned.

There is a provision in the agreement that material shall be purchased from Germany.

Another provision, and an important one, is that if in the future, any railway is to be built westward of the Peking-Hankow line from the point where the German line will connect with it, Germany shall have the preference of supplying the capital.

EASTERN EXTENSION TELEGRAPH CO.

The eightieth ordinary general meeting of the Eastern Extension, Australasia and China Telegraph Company, Limited, was held on May 12, in London, Sir John Wolfe Barry, K.C.B., presiding.

In the course of his address, the Chairman said: The gross receipts for the past year amounted, in round numbers, to £738,000, against £747,000 for 1912, showing a decrease of £9,000. This result may be considered not unsatisfactory, seeing that all our local tariffs in the Far East and many of our through tariffs, were extensively and very substantially reduced during the last six months of the year under review, by which a loss was estimated to take place in the event of the traffics not immediately responding to the tariff reductions.

The full effect of the lowering of the tariffs will be felt in the current year, and it is to be hoped that the considerable reductions which have been made will in the future result in a correspondingly larger volume of traffic. Fortunately, some of the traffics which were not included in the tariff reductions showed a substantial increase during the past year, which in a large measure counteracted the effect produced by the tariff reductions to which I have made reference. Turning to the expenditure, the working and other expenses amounted, in round numbers, to £355,000, against £321,000 in 1912, showing an increase of £34,000.

Nearly one-half of this increase was caused by our cable repairs being more numerous and costly than in the previous year, and most of the remainder is due to the employment of additional staff to meet traffic requirements, automatic and other staff promotions, and to our having to provide half the cost of the new station opened by the Eastern and Eastern Extension companies at Colombo in connexion with our new alternative route to the Ear East.

Unfortunately, the cost of living in the Far East and elsewhere has, as you are doubtless aware, greatly risen in recent years, and we have found it necessary since the close of the year to further revise and improve some of our staff scales of salaries and allowances. The net profit for the past year was roundly £343,000, and after adding £27,000 brought forward from the previous year there remained an available balance of over £370,000.

The usual three-quarterly interim dividends of 2s. 6d. per share have already been paid for the past year, and it is now proposed to distribute a like amount, making a total dividend of 5 per cent. for 1913. It is also proposed to pay a bonus of 4s. per share, or 2 per cent., making a total distribution to the shareholders of 7 per cent. for the past year, and to carry forward £30,616, against £27,535 in 1912.

After making the usual additions to the maintenance, ships' insurance and depreciation funds, £130,000 of the revenue balance has been transferred to the general reserve fund, together with the value of the picked-up Tasmanian cable and stores, amounting to £17,000. On the other hand, the general reserve fund has been debited during the year with £466,000 in part payment of the cost of the new Colombo-Hongkong cables, together with £65,000 for partial cable renewals, and £77,000, representing the loss incurred on the sale of investments during the year. In other words, the general reserve fund has been credited with £147,000 and debited with £608,000, leaving the fund at the end of the year with a balance of £730,000.

Since the close of the year further investments have been realized to provide for the balance of payment for the new cables, and the loss thereby incurred will be deducted from the provision, shown in the balance-sheet, of £200,000 for investment fluctuations. At the end of the current year this account will be properly adjusted. As stated in the report, the new cables between Colombo, Penang, Singapore, and Hongkong have been successfully laid and opened for traffic, and, with the additional cables laid by the Eastern Company between Suez, Aden, and Colombo, a new alternative route to the Far East has been established via Colombo, which should materially assist us in efficiently dealing with increased business.

He went on to say that the revised arrangement for week-end letter telegrams exchanged with Australasia was brought into force on May 1, by which those telegrams were now transmitted *throughout* by telegraph, if it be necessary, in order to secure delivery on Tuesday morning, and the minimum charge, based on the principle of a quarter of the ordinary rate, was reduced from 18s. for 24 words to 15s. for 20 words, with 9d. for every additional word. From the same date that week-end telegram system was extended to the Straits Settlements and other parts of their service.

THE RISE AND FALL OF THE YOUNG CHINA PARTY

A SKETCH OF THE TRIUMPH OF YUAN SHIH-KAI AND THE REVIVAL OF THE OLD-STYLE OFFICIALS

During the past month or two the plans of President Yuan Shih-kai for the better control of the internal affairs of China have developed to a stage where he is enabled to take paramount command, at least for the time being. And there is no reason why his position should not be so consolidated that in the balance of his lifetime he should be able, if he so desires it, to inaugurate striking reforms in the administration of both the provincial and the Central Governments, and for the material betterment of the economic conditions upon which the prosperity of the country depend. He has now the power to do that. From the time of his acceptance of the Presidency of the Republic in February of 1912 up to November of 1913 he was opposed in most respects by the Young China party, and that opposition was sufficient, he always claimed, to prevent him carrying on the government of the country as he deemed advisable. He has now emerged triumphant over those who set themselves to subvert his rule, and in his victory he should find the way to alter many of the disabilities under which the country was alleged to be laboring when subject to the influence of the young and inexperienced students who found themselves elevated as a result of the revolution into positions of power.

The history of the past few years is among the most startling in the annals of the country. What is picturesquely described as the exhaustion of their Mandate from Heaven brought about the overthrow of the Manchu régime by an element hitherto not connected with the rise and fall of dynasties in China. The foreign-educated student is a product of the new time, and it was not till recent years that he was able to measure his prowess. The knowledge of foreign potentialities, a recognition of the source of foreign strength, and an appreciation of the causes of the wealth of the outer nations spurred him on to assert himself in his own land. The attempt succeeded beyond the wildest expectations, and the ease of that success combined with the wide sympathy extended to the Young China party by the outside world had the unhappy and unfortunate effect of unbalancing the leaders and filling them with such an egotism that their fall was as swift as had been their rise. They were unable to contain themselves under the seductive influences which are prone to assail the vulnerable weaknesses of mortal man who has, by force of circumstances which he has not accurately gauged, rapidly and unexpectedly climbed to the pinnacle which he has always regarded as the unattainable.

His Excellency President Yuan Shih-kai.

The Manchus fell because they were effete, but before they succumbed to the wave of popular feeling against them they selected Yuan Shih-kai to form, on their behalf, a Republican form of government. They armed a strong man to carry on a combat against the ultra-radical, and to restrain the impetuosities of the youthful progressives. This was naturally resented by the whole of the Young China party. When the terms were being arranged for the abdication of the Manchus the Revolutionists resisted as long as possible the inclusion of the name of Yuan Shih-kai in the Edict. For a time it was thought that the opposition would precipitate a resumption of hostilities, but lack of money, of arms and ammunition, persuaded the Revolutionists that it would be prudent to accept the wishes of those who were endeavoring to put as good a face as was possible upon a bitterly painful task. The handing over of the Presidential seal held by Sun Yat-sen was the result, and the failure of the Young China party to secure a change of the capital to Nanking, combined with the obvious intention of Yuan Shih-kai not to be bullied or browbeaten embittered them against him to such an extent that the radical element swore to unseat him, or so to embarrass and humiliate him that he would be glad to retire.

Thus commenced the tug-of-war between what was called

the "north" and the "south," the latter striving for a Cabinet form of Government through which they would be able to dominate in the affairs of the State, and for full and final control of the government of the country through Parliament. They aimed at reducing the Presidency to the feeble and ineffective position of an ornamental figurehead. Every move that could possibly contribute to prevent Yuan Shih-kai obtaining money for administrative purposes was made, while the attempts to form cabinets were futile for many months, the tension between the party cabinet faction and those who favored a Presidential system of Government being acute. With the Parliamentary elections the Young China party obtained such overwhelming gains that the Presidential party was placed in a predicament. To extricate themselves was no easy matter, but the determined set against a party cabinet was carried on to the end. One of the most active members of the Young China party, or the Kuo-ming-tang, as it was called, to advocate the party cabinet system, was Sung Chiao-jen, a man who had been frequently mentioned as the candidate of the Kuo-ming-tang for the Premiership. On the eve of his departure from Shanghai for the inauguration of Parliament he was shot and killed, and this tragic event marks the beginning of the open fight between the Young China party and Yuan Shih-kai.

THE UNDOING OF YOUNG CHINA

Who was actually responsible for that murder has never been proved. The man who fired the shot died in prison, and the man who instigated him to shoot escaped from gaol and was eventually murdered in a train while proceeding from Peking to Tientsin, in company—not under arrest—with Government detectives. The Peking party will never be able to erase from the minds of the Young China party the belief that the murder of Sung Chiao-jen was arranged in Peking, even though the principals may in no way have been involved in it. So certain, indeed, were the majority of the Kuo-ming-tang members that the murder was instigated in the Capital that they had determined to impeach the President immediately Parliament assembled, and to avert the possibility of the Kou-ming-tang securing a sufficient majority to carry out their threat the Yuan Shih-kai party commenced to use whatever money and influence they could command to form an opposition strong enough not only to frustrate an impeachment, but also to prevent the Kuo-ming-tang securing any majority on any question of importance. Thus was formed the party known as the Chin-pu-tang.

For sometime immediately before and for long after the inauguration of Parliament bribery was the order of the day. Certain members were tempted so strongly by pecuniary inducements that they wandered from one tang to the other till the procession became grotesque. The effect it had, however, was to prevent business being done. Parliament houses were the scenes of continued uproar; the President was accused of unconstitutional actions, and certainly his bold stroke of securing money by having the final agreement for the Quintuple Loan for £25,000,000 signed without reference to Parliament seemed to justify the charge; and every effort was made on the part of the Kuo-ming-tang to bring him to book. The tactics of the Chin-pu-tang were, however, bound to tell, and weeks passed without any work of moment being done. The Chin-pu-tang plan of campaign was either to prevent a quorum by remaining away, to leave the House before a vote could be taken, or to bring about a suspension of the sitting by creating an uproar. Parliament became a byword—and incidentally developed into one of the sights which all foreign tourists felt compelled to visit if they desired to go away with a record of having seen all the strange things open for inspection in the Capital.

Money was able to deprive the Kou-ming-tang of many of its members, or sufficient, at least, to prevent them ruling the Parliament. Nothing having been accomplished between early April and June, of 1913, the sober members on both sides began to realise that the Parliamentary institution would be jeopardised if they continued along the lines which had marked the first stage of the session. Agents of the Presidential party were continuously at work endeavouring to convince the radicals in the Kuo-ming-tang that their charges against the President were without substantial foundation, but their efforts met with little success. The radicals refused to be convinced, and made no efforts to conceal their intention not to elect Yuan Shih-kai as formal instead of provisional President at the forthcoming election; at the same time clearly allowing it to be understood that they would strain every sinew so to contrive a Constitution that any President would be a figurehead, while the administration would be secured in the hands of a Cabinet responsible to Parliament. A deadlock existed between the parties, but the storm of condemnation of Parliament which arose in the Press ultimately compelled serious consideration of the situation. The result was a Conference of the leaders, the selection of a committee to devise a scheme for a coalition Cabinet, and the setting down of the principle that whoever might be elected as Premier would have power to choose and appoint his own ministers. The conference decided upon a coalition with the then Speaker of the House of Representatives a member of the Chin-pu-tang, as Premier, The Kuo-ming-tang gave approval, but to their astonishment the Chin-pu-tang refused to do so on the ground that the selected Premier belonged to the smallest party forming that body and therefore had no title to the post. Internal jealousies were disastrous to the Chin-pu-tang. It had never settled into any sort of solidarity, and this exhibition of petty feeling finally prevented it doing so. The strongest element in its composition known as the Kung-ho-tang seceded as a result and effected an arrangement on June 18, 1913, to co-operate with the Kuo-ming-tang if the latter would sink their prejudices against Yuan Shih-kai and elect him formal President. This combination was of such immense importance to the future of the Young China party, meaning, as it did, absolute power in Parliament, that the Kuo-ming-tang agreed not to run a candidate for the Presidency, and left it to the members individually to decide how they would vote at the Presidential election. The moderates of the Kuo-ming-tang rejoiced at this arrangement, especially as they had secured a promise from Sun Yat-sen to withdraw from politics, and it was generally thought that a restraining influence would be exercised over the incorrigible spirits who, from the confines of the foreign settlement of Shanghai, had been murmuring revolution for many months.

Vice-President Li Yuan-hung.

While the radicals in Parliament haggled and the moderates strove to find a workable solution of the difficulties, the President was exercising himself with the provinces. In many of them the Governors were Kuo-ming-tang members who employed themselves making the proverbial hay while the sun shone. They failed to make any financial contributions to the Central Treasury, and, it is alleged, placed any surplus they could secure in a party war chest for future reference. Governors with power sufficient openly to divert public funds in this manner constituted one of the gravest menaces to the tenure of Yuan Shih-kai as President, particularly as the tension created by the murder of

Sung Chiao-jen had been increased by allegations against the President of unconstitutionality and charges of the assumption of dictatorial powers, to say nothing of the growth of the belief that he was preparing either to restore the Manchu Emperor to the Throne or occupy it himself. Setting himself gradually to eliminate the most dangerous of these officials he eventually accomplished his aim. Detachments of northern troops were quietly and unostentatiously moved to Hankow and Wuchang, the key to the Yangtsze, where the arsenal and other strategic points were occupied; and others were drafted down the Yangtsze to prepare the way for the removal of the Governor of Kiangsi province, an old Tung-ming-hui official from whom trouble was expected. Stipulations having been made that northern troops would not be advanced into the province the Governor eventually consented to give up his post—and did so. That he was prepared for eventualities is undoubted. He left for Shanghai (to return later) but hardly had he departed than northern troops are said to have moved forward contrary to promise. The Kiangsi troops fired upon them.

Mr. Hsu Shih-chang, Secretary of State.

Mr. Sun Pao-chi, Minister of Foreign Affairs.

The rebellion of the summer of 1913 having thus been developed Yuan Shih-kai was determined to mince no actions in finally placing his enemies beyond the power of further harm. Sun Yat-sen, Hwang Hsin, Chen Chi-mei, and other old revolutionaries entered actively into the campaign. They employed available troops in the Yangtsze Valley under the leadership of General Hwang Hsin, and flags bearing the legend "tao Yuan" (kill Yuan) flouted the winds from the walls of Nanking, Kiukiang, and other cities. The eventual advance of northern troops had a salutary effect upon at least one of the leaders, however, for Hwang Hsin packed his bags, boarded a steamer in the Yangtsze, and fled incontinently for Japan.

This ignominious flight struck consternation into the hearts of some of the rebels, but others kept up the fighting both at Shanghai, Nanking, and Kiukiang for some time. The rebellion was destined to fail. Yuan Shih-kai's forces pressed steadily forward and his agents succeeded in satisfying the rebel troops that it would be profitable for them to give up the struggle. Dollars rather than bullets may have constituted the strongest argument—but whatever it was Yuan Shih-kai triumphed, and put to flight Sun Yat-sen and his followers, most of whom took refuge in Japan.

Apart from suppressing the armed movement against him Yuan Shih-kai was able to range in proper perspective those who were for him and those who were against him. This, from his point of view, was a tremendous advantage and worth the struggle. He need have no further recourse to humbug. To urge him to make his victory complete various Governors in the provinces telegraphed him at once to suppress the Kuo-ming-tang party throughout the country on the ground that it was a rebel organisation, but that suggestion was not then adopted. Yuan Shih-kai had his own game to play.

The rebellion brought about the ruination of the Young China party. It was an egregious blunder, and one which, it must be emphasised, was not countenanced by the whole party, particularly the moderates in Parliament in Peking. The attitude of these members during this tremendous crisis was, in fact, the most curious spectacle confronting those observers who were without means of knowing the inwardness of the situation. The arrangement the Kuo-ming-tang had made with the Kung-ho-tang gave them a superb opportunity to gain all their ends in a thoroughly constitutional way, and it was with the greatest elation that the leaders contemplated a cessation of the constant turmoil that had marked the Parliament to this time. They

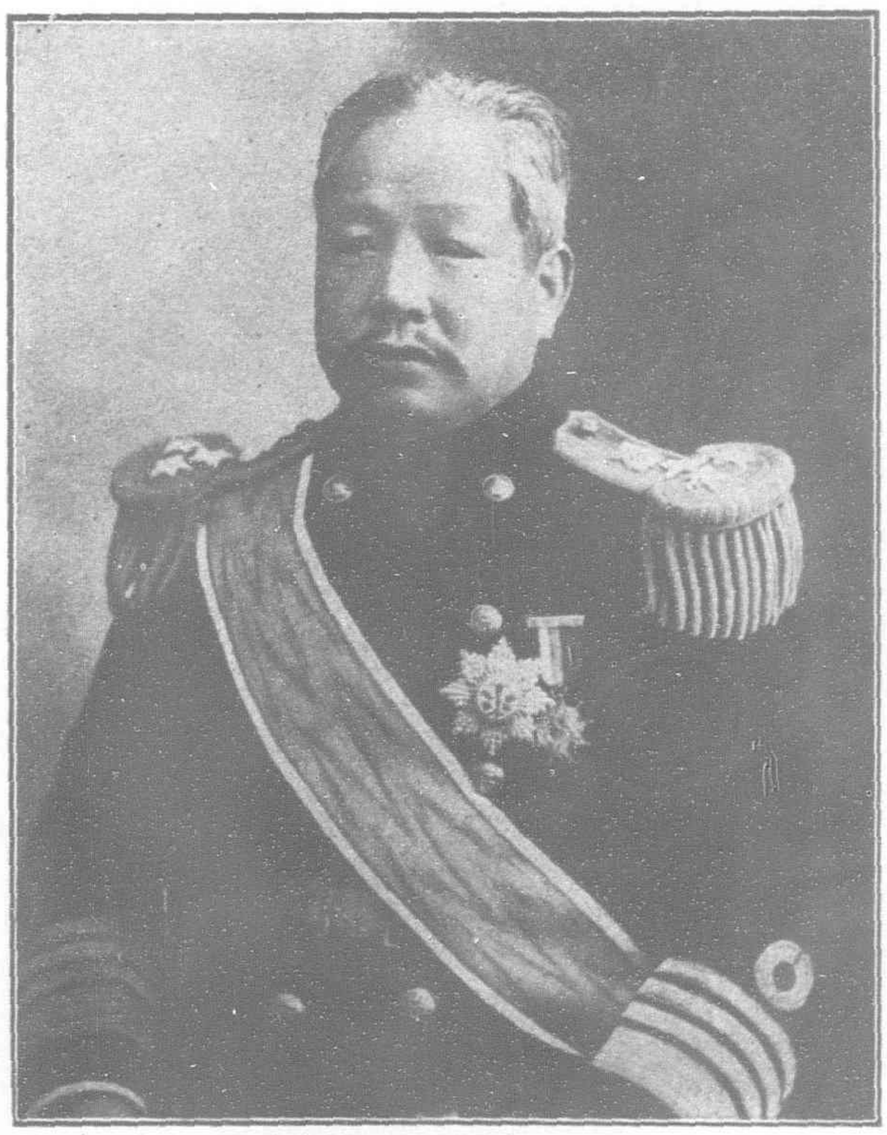
were kept in complete ignorance of the rebel developments in Shanghai for the reason no doubt that Peking was not considered safe as a repository for any secrets, and, being in ignorance, were satisfied in the belief that their efforts to convince the

Mr. Chow Tzu-chi, Minister of Finance.

Shanghai extremists of the folly of their attitude had prevailed. The outbreak of the rebellion and the immediate announcement that the old leaders, such as Sun Yat-sen, had declared themselves against Yuan Shih-kai was as a thunderbolt to them, and had it not been that their consciences were clear they would have fled the Capital in fear of the vengeance of the man their party had set themselves against, and who now, with an open declaration of war, had all the political representatives at his mercy in Peking. Yuan Shih-kai had but to send a squad of soldiers to Parliament House or to the Kuo-ming-tang headquarters to arrest the whole political section. But he did not do so for the reason that he needed the Parliament for a while longer. Some of the Kuo-ming-tang, in fear of their lives, did actually flee, but the leaders determined to remain in the Capital and attend to their Parliamentary business. The coalition with the Kung-ho-tang enabled them to hold the party together. Many of the members who had got as far as Tientsin returned, and curiously enough Parliament entered upon the most progressive part of its career to that time.

That Yuan Shih-kai permitted the Kuo-ming-tang members to sit in Parliament while he was waging bloody warfare against their comrades in the Yangtsze Valley to determine whether he or the Young Chinese were to dominate in the State, amazed all foreign observers. At any time it was expected that the President would order a general arrest of Kuo-ming-tang supporters, and to the continued astonishment of the country he refrained from doing so even at a later stage when the Constitution Committee refused to permit his delegates to enter the Temple of Heaven when he desired them to put before the Committee his wishes in regard to the Constitution. The constant reports of success or ill-success of rebel forces left the Kuo-ming-tang apparently unmoved. They gave no clue as to their feelings to any of the hundreds of detectives on the watch. So far as outward and visible signs could show no contest for supremacy might even have been thought of. Even the gradual growth of the knowledge that Yuan Shih-kai must win did not unnerve them, though when a Mandate was issued on July 22 prescribing Hwang Hsin, Chen Chi-mei and a few other leaders, thay felt that a move would be soon made to notify them that they could no longer exist as a party. The first indication that the President resented the attitude of Sun Yat-sen was given on July 24, when a Mandate was issued cancelling the authority given to him in connection with railway construction, and by the 30th the back bone of the rebellion had been broken, leaving Yuan Shih-kai virtually master to deal at lesiure with his enemies. To test the Kuo-ming-tang he issued a Mandate on August 1, giving the party three days in which to declare its policy, and to throw out from its membership Hwang Hsin, Chen Chi-mei and other leaders who had been active in the rebellion. Sun Yat-sen was not mentioned. The Mandate was complied with, and at once an anxiety became observable on the part of the Yuan Shih-kai party to ascertain how Parliament stood with respect of the forthcoming election of President. Here then was the reason for the preservation of Parliament. The Parliament had been duly elected, it stood as the representative of the people, and by it the first President was to be elected. Yuan Shih-kai had constantly professed to be constitutional, and that idea he wished to preserve to the end.

The Kuo-ming-tang, apprehensive of their future, were watching developments closely. Overtures from the Government suggested that they should agree to the early passage through Parliament of the section of the proposed Constitution dealing with the election of President, and that, combined with an understanding not to oppose Yuan Shih-kai, was part of a



Admiral Liu Kuan-hsiang, Minister of the Navy.

bargain by which the Kuo-ming-tang were able to secure that Sun Yat-sen should not be proscribed as a rebel, as others had been. The Constitution drafting Committee which was sitting in the Temple of Heaven—the Chairman and the majority of the members being of the Kuo-ming-tang—consequently rushed

through the provisions for the election of the President; the Houses of Parliament passed them, and the election took place on October 6, the place of election being surrounded with military to the great intimidation of many of the members. To the disappointment of the Yuan Shih-kai party and to the surprise of the public their candidate was not elected on the first or the second ballot, sufficiently high majorities not being available. On the third ballot, which provided that the candidate with the largest majority should be declared elected, Yuan Shih-kai was returned as President, Li Yuan-hung receiving 179 votes and others lesser numbers. The tenacity with which some of the extremists held to their views and refused to cast a vote for Yuan Shih-kai was not lost sight of, and their attitude in Parliament subsequently was closely watched.

Though elected to the first position in the land Yuan Shih-kai did not control. The Parliament stood between him and effective dominance, and Parliament still showed a disposition to adopt a Constitution which would tie his hands completely. How to overcome Parliament was the puzzle. The members were behaving themselves well, business was being transacted, and the general air was one indicating a certain permanency. An attempt was made in the appointment of the Cabinet following the Presidential election to induce Parliament to throw out the nominee for Premier, in order to give an excuse for strong action by the President, but the Kuo-ming-tang were aware of the scheme and accepted the first Premier nominated with an overwhelming majority. This saved the Parliament for some time, but it had to go, and the only course open to the President was to assail the Kuo-ming-tang as rebels and remove them. Various Governors in the provinces once again despatched telegrams urging the suppression of the Kuo-ming-tang members, and though it was long after the rebellion evidence mysteriously arrived from somewhere purporting to show that members of Parliament had been actively connected with the movement. On November 5, therefore, Yuan Shih-kai brought off his coup by publishing a Mandate declaring the Kuo-ming-tang to be a rebel organisation, expelling the members thereof from Parliament, and ordering the abolition of the party throughout the country. Every member of the Kuo-ming-tang was visited by the police, their Parliamentary badges and certificates being taken. Great care was observed not to have members forcibly dealt with, and the coup was carried through without mishap.

General Tuan Chi-jui, Minister of War.

Before they were aware of it the Young China party in Parliament were deprived of their power, and incidentally Parliament was destroyed. No quorum could be found, and though efforts of a strenuous character were made by the surviving parties to have the election certificates of certain members returned their importunities availed nothing. Yuan Shih-kai had struck, and he was not disposed to relent.

With the Kuo-ming-tang downfall also collapsed parties who had assisted the Presidential party to accomplish their aim, and though much energy was expended in an endeavour to save the legislative institution from the wreck by having the reserve members from the provinces brought up it was discovered that most of those were also members of the dissolved party. Gradually the painful realisation dawned upon all sections of the Young China party that they had played their last card in the present game. Nor were they permitted to remain long in doubt as to what the attitude of the President would be towards them. The police became excessively active throughout the country. Thousands of detective were employed to hunt down rebels. Executions were numerous—and swift. A reign of terror lasted for many months, and, it is alleged, as many innocent went to their deaths as guilty. The agents of the Government were out to strike terror into the hearts of all who might think of revenge.

Until April of 1914 these conditions obtained, and an amnesty was only granted then as a result of an outcry in the foreign papers published in China against the wholesale executions of guilty and innocent alike. The aims and ambitions of the Young China party who rose with the revolution were thus frustrated, and Yuan Shih-kai, the man they hated, but regarded cheaply, was left triumphant to control China according to his own lights and without the assistance of any of those who believed that upon their talents depended the future of the country. Of the elements who contributed to this swift submersion of the Young Chinese the Japanese returned students stand foremost. Among them were the radical revolutionists. The students from Britain and America mostly endeavoured to exert a restraining influence but it was scornfully rejected and therefore unavailing. The Japanese educated students possessed the little knowledge that is a dangerous thing, and added to that was a largely developed spirit of self-seeking and lack of patriotic motive that over-rode the saner counsels of the better educated and wiser members of their party. The handicap was too great for the party and it fell a victim to lack of far-sighted, wise, trained, and commanding leaders; to a general overweening conceit; to a false estimate of its own power and importance, and above all to a sad lack of experience both in rank and file.

OLD STYLE REDIVIVUS

The downfall of the Young China party, wrought as it was by the suppression of the Kuo-ming-tang and the dissolution of Parliament, placed Yuan Shih-kai in full and absolute command of the Central Government, and gave him the opportunity for which he had long been waiting to inaugurate a system of provincial administration which would in his judgment guarantee the fullest measure of control from Peking. For the previous two years no progress had been made; financial affairs had become so deplorable that bankruptcy stared the country in the face; no organisation in any department could be carried on, and uncertainty among the officials caused an unrest that was demoralising. To the activities of the Kuo-ming-tang were ascribed these unsatisfactory and dangerous conditions. Certainly the Young China party consistently opposed the reappointment of officials whom they regarded as reactionary—and certainly, too, the President showed as consistent a disinclination to place in positions of power any of the returned students, mostly, he argued, because their western learning compensated in no way for their lack of experience of the conditions in their own country or for their lack of knowledge of the methods best calculated to govern it successfully.

The tendency of Yuan Shih-kai was always to fall back upon the men of the old time who, in his judgment, could alone

render effective service. Rightly or wrongly he set himself against the employment of theorists who failed to realise that China was not ready to have imposed upon it forms of administration which had developed in foreign countries only after years of systematised application. To a greater or less extent the foreign Legations in Peking sympathised with the President in this respect, though they looked to him for a progressive policy rather than a reactionary one. This he repeatedly promised to carry out, contending that the only way effectively to do so was to reinstate in all high positions the old officials who had been trained to the work what time they absorbed that peculiar knowledge of their countrymen so essential to possess if efficient government is to be maintained over them. With this idea, naturally, the Young Chinese are in the strongest opposition, but the moderates among them are now content to make a virtue of necessity and permit the President to have a free hand to demonstrate that his contentions are correct.

The sight of a Parliament, unwieldy in numbers, and filled with energetic youngsters clamouring for a new order in customs as well as in Government was a constant source of irritation to Yuan Shih-kai. To root it out while still professing a desire for popular representation of the people was his most difficult task, but to extirpate it he was determined. He was fully aware of the measure of distrust evinced towards him by the Young China party, and realised that if they succeeded in gaining a hold of the legislature his powers would be shorn to the last limit. Yuan Shih-kai is not the man to accept a curtailment of authority from the section which he is still prone to regard as juvenile, and since the Young Chinese were openly bent upon his downfall he felt it incumbent to safeguard himself, firmly believing that it was for the best interests of China so to do. The fight that ensued between the Chin-pu-tang and the Kuo-ming-tang in Parliament, and which culminated in the abolition of the latter, was the fight between Yuan Shih-kai and Young China.

Mr. Chang Chien, Minister of Agriculture and Commerce.

From the time of his assumption of office Yuan Shih-kai was desirous of surrounding himself with the old officials whom he had known in previous days, but hedged in as he was with certain obligations to the Young China party he was unable to do so. Every time the name of an old official was mentioned for a position the political heavens were shaken by screams of violent disapproval. The endeavour of the President to secure trusted henchmen in the Cabinet was futile—Parliament would have none of it. Long ago Hsu Hsih-chang, the present State Secretary, was mentioned as possible Premier. The mere suggestion of such a thing made the Young Chinese see red. The Cabinets which Yuan Shih-kai worked with up to the time he secured his freedom from the thralls which the revolution imposed upon him were the nearest approach to his desires that the Young Chinese would tolerate. None of them suited Yuan Shih-kai and the constant changes in Premiers and Cabinet Ministers is therefore explained.

Had it been possible the Premier and some of the Cabinet who were in power when Parliament was dissolved would have been thrown out simultaneously, but the President was not certain how such a sweep would be viewed by foreign countries to say nothing of China itself. Through that Cabinet he did vainly essay a change in the provincial administration, and made plans for the drafting of a new constitution to enable him to rule instead of be ruled in the future. Always the Government were appealing to the provinces for financial contributions, but the response was negative; while Provincial Assemblies existed the Governors were unable, however willing, to forward remittances, and Yuan Shih-kai felt it absolutely necessary to abolish them. Strangely enough the provinces remained quiet under this wholesale demolition of the organisations which they had cherished as the material evidence of their liberty and independence. The explanation is the desire of the people for peace in which to continue their occupations, and the destruction of the revolutionary weapons held by the extremists in the Young China party.

Yuan Shih-kai pursued his policy of clearing away obstructions by gradual stages. With Parliament and Provincial Assemblies out of the way he revived the worship of Heaven and set to work to devise a "provisional constitution" giving him a wide power of ordinance and an absolute veto. On May 1 the compact was promulgated. It provides that the President, as the head of the nation, shall have the controlling power of the administration; declare war and conclude peace; convoke or dissolve the Li Fa Yuan, or legislative body, with the permission of the Tsan Chen Yuan, a Council of State comprised of Presidential nominees; appoint and dismiss civil and military officers, and above all be the Commander-in-chief of, and control, the army and navy, with sole power "to decide the system of organisation and the respective strengths of the army and navy." The Constitution makes provision for a Secretary of State "to assist the President," it being laid down that the Ministers of the various Boards are simply to control affairs "in accordance with orders," and it also revives the Censorate, which may impeach the Secretary of State or any of the Ministers "when they commit a breach of law."

In a long Presidential statement explaining the reasons which made a revision of the provisional constitution necessary it was declared that the inspiration was due to telegraphic suggestions from various governors in the provinces, and was emphasised by the damage done by the members of the previous Parliament in "cutting the foot to make the shoe fit." As is usual in such cases the President expressed the fear that in his "old and incapable" age the duties "imposed upon him" may be

too great, but expressed a desire not to shirk them as this is "not the time for any person to be selfish."

With this desirable constitutional compact in hand Yuan Shih-kai introduced Hsu Hsih-chang as State Secretary and remodelled his Ministry, only one of them, Tang Hwa-lung, having been actively connected with the revolution. He, however, was the head and front of the Chin-pu-tang, which party accomplished so much for the President, and it was only fitting that he should be rewarded by being appointed to be Minister of Education at least. The remainder of the Ministers were all of the old school, most of whom had worked with the President in the past as well as in the Cabinet which controlled affairs from the time of the dissolution of Parliament, and all possess the desirable attribute of thoroughly understanding the necessity which exists for the Presidential will to prevail.

The President, being now in supreme power, laboured to perfect the plans he had long conceived properly to adjust matters between Peking and the provinces. The habit which the provinces had got into of disregarding the wishes of the Capital and ignoring the financial needs of the Central Government had to be corrected. A separation of civil and military affairs was immediately desirable and to this end a Presidential Order was issued on May 23, virtually reviving, but modifying, the system of provincial administration existing in the time of the Manchu régime. Under it the Governors will carry out the administration of civil affairs with supervisory powers over finance and judicial matters. The old finance departments were abolished, and new ones with orders direct from Peking were created with the object of firmly, and finally if possible, securing a steady flow of revenue to the Central Treasury. If this be accomplished Yuan Shih-kai will have overcome one of his chief difficulties, and will smooth the way to a maintenance of his control over the country. Upon financial reform hinges the future of China. The troubles of the past two years so far as the Capital is concerned have been based upon the cessation of contributions from the Provinces. In the old Manchu times Peking regularly secured from seventy to eighty million taels per annum—a sum which dwindled after the revolution to nothing, and only quite recently revived to at most two million dollars. During the past two or three months, however, the dominance of Yuan Shih-kai has produced a remarkable fillip, and last month seven million dollars came in, giving a surplus of some three million over the needs of the Central Government, which average about four million dollars per month. This result encourages the belief that with the introduction of the new provincial system, or rather the revival of the old system, the income from the provinces will be brought to its old level within a very few months if the popular mind is not disturbed by any forcible reaction likely to deter the taxpayers from paying their dues. Yuan Shih-kai has, of course, always pleaded that he was compelled to place the Young China party *hors de combat* to enable him to bring about a restoration of the finances, and on that ground he has received the sympathy of the foreign Legations. His justification will undoubtedly be ample if he succeeds in restoring financial conditions without jeopardising the peace of the provinces, and particularly if by a progressive policy he is able to place trade and commerce upon a sound footing,

Mr. Chu Chi-chien, Minister of the Interior.

Insofar as the military is concerned the forces will now be under the control of the Ministry of War, who will be represented in the provinces by special Commissioners. The High Intendant will have no authority over the troops, although he will have the direction of the police and patrol forces, and should the necessity arise at any time for the employment of the military he must apply to the nearest officer in the vicinity for such aid.

Each province will be divided into Tao or Circuits, and Hsien, or Districts, to simplify administration, the officers in charge of each being under the High Intendant of the Province. The control of all these officials will be with the President since it is laid down that the Governors shall not receive instructions from anyone but the President, the various Ministers having been notified that they may not give any orders to any Governors, their connections, if any, being strictly limited to exchange of despatches. Patronage is thus to the widest degree retained in the hands of the President, and the many posts in the provinces will be filled by officials upon whom he can place reliance. Already many old servants of the Manchus are finding their way back into familiar positions in the provinces, as well as in metropolitan circles.

Following the promulgation of the provincial administration system there came out on May 24 a Presidential Order setting forth the rules and regulations of the Tsan Cheng Yuan, or Council of State, a body designed as a kind of Advisory Council. Its members will be nominated by the President, and their duties will be to "attend to the enquiries of the President, and discuss administrative affairs." The matters upon which they may deliberate are stated as "explanations on doubtful points in the Constitutional Compact and all other laws in connection with the Constitutional Compact; and disputes between the executive and judicial departments over the definition of authority," while the President may address enquiries to them and obtain their opinion upon the conclusion of treaties, the establishment of administrative offices, the reform of the finances, the development of education, and the expansion of industry. They will have no legislative powers, though they may make suggestions to the President if any Bill containing such is signed by at least ten members. The Chairman and Vice-Chairman shall not be elected, but shall be specially appointed by the President, and the members numbering from fifty to seventy shall also be appointed by the President from men who possess one of the following qualifications—"Those who have rendered meritorious service to the nation; those who possess technical knowledge in law or politics; those who have administrative experience; scholars of profound knowledge who are authors of works which are of public utility, and those rich in experience and knowledge of industry."

This body is then solely and wholly a Presidential organ, and while there was much speculation upon the promulgation of the regulations as to the character of the members who would be selected to compose the body the public was not left long in doubt. On May 26 the "Government Gazette" contained the names of the nominees, who were headed by General Li Yuan-hung, the Vice-President and hero of the Revolution, as Chairman. There were seventy of them, all savouring of old times. Classified in seven groups they represented officials with metropolitan experience, such as Grand Councillors, Presidents and Vice-Presidents of the old Boards, officials with Provincial experience such as Viceroys, Governors and Treasurers, Ministers who had served in various countries abroad; old representatives of the army and navy; old officials with knowledge of law, of commerce, of industry, of literature. Others have served Yuan Shih-kai since the establishment of the Republic in capacities such as Military or Civil Governors of Provinces, while a few were members of the late Parliament. Among them are no Young Chinese.

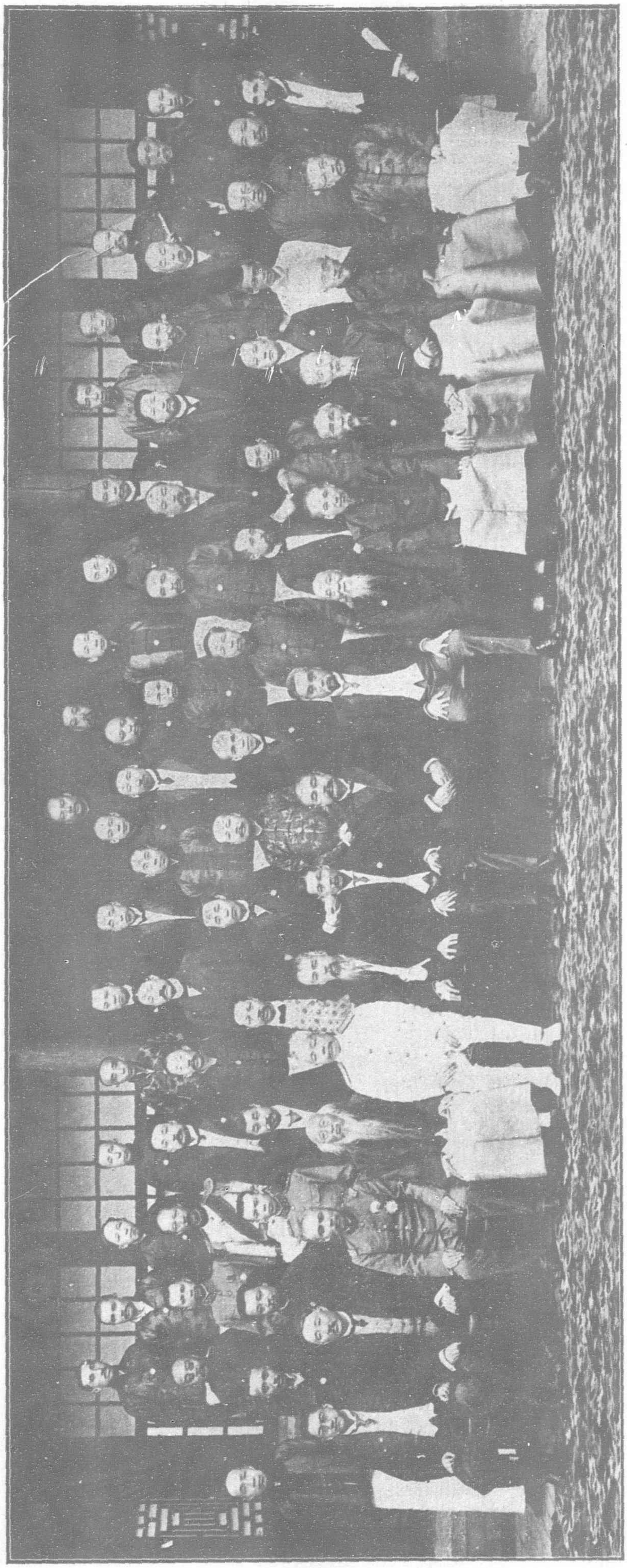
In the judgment of Yuan Shih-kai these are the only men who can assist him to place the country on its feet, and he chose them, a high official recently affirmed, because they are the only ones through whom reforms can be carried out. A dictum which sounds strange to the ears of the Young China party who worked in the revolution to throw them out of office as obstructionists.

The regulations for the Li Fa Yuan, or legislative Chamber, have not yet been promulgated by the President, but a draft of them shows that the members will be partly elected and partly appointed. Every hsien or district will elect ten candidates who shall be nominated by the Magistrates from among the natives of the districts. Five of them shall be the wealthiest persons in the district while the other five shall be nominated from among such classes as have had long administrative experience, a knowledge of law, or are scholars. Or failing sufficient possessing these attributes their places shall be taken by men from the propertied class. These ten candidates shall assemble in the District city and shall choose from among themselves one elector, who shall proceed to the Provincial Capital and there with others similarly chosen shall elect as members of the Li Fa Yuan one-tenth of their number. The President retains the right to appoint, in addition to the elected members, one-tenth of the total number of the Li Fa Yuan, while each Provincial Governor will be entitled to nominate two members. The territories of Mongolia, Tibet, and Ching-hai will have representatives elected according to special regulations, and the total number of members will be about 300.

These regulations contain ample safeguards to prevent any disturbing or undesirable element from creeping into the body. They are designed, of course, to shut the Young China party out, and if the scheme can be consummated the President will have a so-called representative organ under his control which will do what he wishes without unseemly conflicts such as have marked the preceding Parliaments. It is possible that this organisation may develop into one which will be able to hold the respect of the people, and if it does the ultimate transition into a purely representative body should not be difficult.

With the completion of the organisation of the so-called Parliament the President will signalize his triumph over the Young Chinese and will be free to proceed with the reorganisation of the country upon the lines which he claims will alone bring China to a continuously progressive stage. He has deemed it wise to revive the worship of Heaven at the old

THE COUNCIL OF STATE



This photograph of the Council of State was taken on June 20 just after the inauguration. The Chairman of the Council, Vice-President Li Yuan-hung, is in the center of the bottom row. The Vice-Chairman, Mr. Wang Ta-hsieh, is sitting on his right-hand side and Mr. Hsu Shih-chang, Secretary of State, on his left.

altar where Emperors have for a long years accounted for their stewardship, and this year Young China will, all being well, witness the President of this newest of Republics recounting to Heaven the steps he has deemed it prudent to take to keep the country intact for the enjoyment of the brethren of the five races and the benefit of mankind. And meantime foreigners will watch with great curiosity the development of his plans to see whether they will retard rather than promote the interests which they are specially desirous of forwarding in the country.

INAUGURATION OF THE COUNCIL OF STATE

On June 20 the Council of State was inaugurated with some show of pomp and circumstance at the building formerly occupied by the Senate. There were 45 members present, out of the 70 nominated, including the Chairman, General Li Yuan-hung, the Vice-President of the Republic. The Secretary of State, Mr. Hsu Shih-chang, represented President Yuan Shih-kai and read to the gathering the address of the President. It pointed out to the members what the President deemed the organisation to be.

"It is feared," he wrote, "that my observation and experience are insufficient, therefore the Tsan-Cheng-yuan is inaugurated as an organ of inquiries.....and it is also intended to take temporarily the place of the Li-fa-yuan." This means, some Chinese newspapers declared the next day, that the creation of the legislative organ will be delayed several years. The President, however, has declared otherwise, but in the meantime the Council of State is the only body functioning, and the people will join with the President when he said in his final sentence—"I rub my eyes to witness the merits which will be achieved."

The Chairman, in his address, remarked that "by the blessings of God the hope of our people has been realised; the turmoils have again subsided and things have returned to their normal course," and in eulogising the merits of the President, added—"with regard to the introduction of systems or reform it is but right that all should be decided by him as the ore should be melted by the furnace." He recounted how, "before the rebellion in the South was suppressed, the National Assembly was split into several parties engaged all the time in quarrelling," and explained that as this state of affairs could not last "steps were adopted to dissolve the Kuo-ming-tang, and, when there was no quorum for the Houses the function of the National Assembly was suspended." General Li Yuan-hung placed the onus of this action upon the shoulders of the Assembly itself, but added that unity was impossible owing to the number of members being too large. Then he further explained the powers of the Council of State, declaring that "this Yuan is to form an organ of inquiry, with power to pass any questions, and before the establishment of the Li-fa-yuan—or Legislative Organ shall have the authority to act as a legislative body," added that as this power had been given it showed "the sincerity of the Government in maintaining the Republican form of Government."

The Tsan-cheng-yuan was thus inaugurated, and its first business meeting was fixed for June 24. Should the body wisely demean itself it should be distinctly helpful to the country, but it would be folly to prophesy anything more than the only thing it is safe to prognosticate in China—"we shall see what we shall see."

THE SECRETARY OF STATE EXPLAINS

In an interview which the writer recently had with Mr. Hsu Hsih-chang, the Secretary of State, it was explained that officials of the old régime were being called back into power merely "to show the young men how to manage administrative affairs so that, eventually, the young men will be able, by the experience acquired, to take charge of these matters themselves. The young men will be given every chance to acquire experiences. The Secretary of State scouted the idea that the revival of old officials meant a revival of old customs. The Government, he declared, intended to pursue a progressive policy; one which would make for the betterment of conditions in the country.

"The object of changing the administrative systems was two-fold," he said. One was to place financial affairs upon a proper basis, and the other to try to reduce the number of troops. Within two years the Government hoped to have the finances upon a basis equal to that of the most prosperous times of the old régime and a few years later to have them more prosperous.

"Disbandment of troops has been proceeding slowly for the last year, but the urgency of suppressing bandits who had arisen in various parts compelled the employment of more troops than otherwise would have been necessary. When the bandits are overcome, the reduction of the number of troops will be carried out more rapidly and more regularly.

"The system of administration now adopted in the provinces is an improvement upon that which obtained under the old régime. The highest official is called the High Intendant of the Province and will be responsible for the good order of the Province. He will have fairly wide powers because the extent of China is so great that it is almost impossible to have complete centralization. The Central Government would find it tremendously inconvenient to direct all provincial policies, and for that reason it has been decided to empower other officials to act along certain lines for the development of the ideas of the President. The High Intendant will have the power of a high Provincial Official combined with that of a high Metropolitan Official, it being felt necessary to give the foremost official prestige to enable him to restore order and command the respect of the people. Under the High Intendant of each province will be the Intendants of the Circuits, similar to the Taotais of the old régime. The circuit Intendants will render assistance to the highest authority by governing the different circuits of which the Provinces will be composed. Each Intendant will have under him a number of Magistracies or Districts, which will be controlled by Magistrates. This simplifies the old system which divided a province into departments, circuits, prefectures, and magistracies, a system full of complications and which did not work well. The simplification of the old system now introduced will suit the conditions of the people better and meet the requirements of the times, though if experience shows that it is warranted the Government will make further modifications.

Mr. Tang Hua-lung, Minister of Education.

"Insofar as the military are concerned the troops will be divided into two classes; one will be the military force proper to be used for national purposes, and be under the command of a high military official, and the other will be the gendamerie which will be used to keep order in the Provinces and be available for the use of the High Intendant. These two forces will be under the contral of the Ministry of War in Peking, who will also be responsible for their pay. Each city will, of course, have its own police, the upkeep of which will be seen to by the provinces."

A BIG TELEPHONE SCHEME

The Japanese Department of Communications proposes to effect a plan of extension of telephone system to be carried out in five years at an expenditure of 4,000,000 *yen* a year, to instal at least 70,000 telephones.

Whether the proposal will be introduced at the next session of the Diet is not known, and the authorities are quite sceptical as to its prospects, as the Budget for the next fiscal year is to be compiled on the basis of minimizing all possible expenditure. The demand for the installation of telephones is increasing every year, and the Department has standing applications of no less than 120,000 at present. In order to fulfil those applications, a plan for installing the apparatus on a large scale is considered necessary. As to the third extension of the system this year, the Department has only 3,000,000 *yen* on account of the failure of the Budget, and only "urgent cases" will be dealt with.

THE DEVELOPMENT OF SZECHUAN

THE PRITCHARD-MORGAN CONCESSION

A telegram from London which appeared in China papers early in June announcing that arrangements were being concluded by the Eastern Pioneer Company and two British houses to develop the resources of Szechuan province with British capital indicated to the general public that steps were at last being taken in some way to give effect to an agreement obtained from the Chinese Government in 1899 by Mr. Pritchard-Morgan. That agreement has been the subject of much controversy. The concessionaire has fought incessantly to have effect given to it, but claiming that the agreement had lapsed the old régime in China has refused consistently to comply with his demands.

With the disposition being shown by the present Chinese Government to have the resources of the country exploited an era of Development Company promotion has opened, and as a result all foreigners who have any claim at all to rights which will enable them to participate are able to secure the necessary assistance from their Legations in Peking to assist them to realise in some way or other the benefits which they believe will accrue if opportunity is obtained to commence operations.

The successful negotiations carried on by the Standard Oil Company to work certain oil deposits spurred many other concerns into activity, and in fact brought to life a real interest in particular in the Pritchard-Morgan concession. That the concession will be confirmed by the Chinese Government on the original lines is not, however, likely. The Government is willing to sign a new agreement, and negotiations have been carried on, but the operations of the Company will be restricted. There will be no exclusive right to the resources of Szechuan, though ample opportunity will be given to the concessionaires to employ their capital in what ought to be profitable avenues. In view of the negotiations and the possible eventualities a review of the history of the Pritchard-Morgan concession may be interesting, at least as a record.

The Red Basin of Szechuan.

In 1896 the late Li Hung Chang made an extended tour throughout Europe, and announced that China was about to be opened up to trade and commerce. Mr. Pritchard-Morgan called at the British Foreign Office and had an interview with Lord (then Sir Thomas) Saunderson on the subject, with the result that he obtained a letter of introduction from him to the late Sir Holliday Macartney, Councillor to the Chinese Legation, pointing out Mr. Pritchard-Morgan's qualifications to assist in the development of China.

Armed with this letter Mr. Pritchard-Morgan left England with Li Hung Chang in August, 1896, and on the passage to New York prepared a Memorial to the Throne of China for the creation of a Mining Administration, which Memorial Li Hung Chang approved, and on his return to China acted upon. Li Hung Chang desired personal letters from Lord (then Mr.) Curzon and Mr. Joseph Chamberlain (both then Ministers of the Crown) setting forth Mr. Pritchard-Morgan's qualifications to assist in China's development, for production to the Chinese Government. These letters were written and forwarded to and used by Li Hung Chang.

On his arrival in China Li Hung Chang, on October 29 of that year, cabled Mr. Pritchard-Morgan to come to China with his geologists and experts. Mr. Pritchard-Morgan immediately engaged a staff of three British subjects and one American and left England with them, arriving in Shanghai on December 28.

Li Hung Chang telegraphed Mr. Pritchard-Morgan, while on his way to China, to consult and assist His Excellency Taotai Sheng on Railway Regulations as well as Mining matters on arrival at Shanghai. Mr. Pritchard-Morgan and staff were continuously engaged in consultation with Sheng until March 6, 1897, when they all left Shanghai for Peking, arriving there March 15. On arrival at Peking Mr. Pritchard-Morgan informed the British Minister of the object of his visit, and consulted him on the subject.

On April 19 the American Engineer, Mr. Shockley, was instructed by Li Hung Chang to visit and report on Mines at Jehol, and Mr. Mayer, of the British Legation, accompanied him to Jehol for such purpose.

On April 30 Li Hung Chang gave Mr. Pritchard-Morgan a Power of Attorney authorising him to proceed to England to negotiate with the British Government to guarantee the interest on a loan for £16,000,000 to pay the Japanese indemnity. Mr. Pritchard-Morgan reached England on June 22, 1897, and continued these nogotiations until January, 7, 1898, when the Foreign Office informed Mr. Pritchard-Morgan that the Chancellor of the Exchequer did not see his way to comply.

In March, 1898, Li Hung Chang again cabled Mr. Pritchard-Morgan to return to China, which he immediately did. On arrival in China he engaged three additional Engineers, Mr. J. V. Burn Murdoch, Mr. John Hay, and Mr. J. Holton Bush. In July Messrs. Hay and Bush were sent by Li Hung Chang to visit and report upon the Pingtu, Chaouyuan, and other Mines in the Province of Shantung. Work was continued until November, 1898, when the British Legation pressed the Chinese to do something practical.

On November 16 Mr. Fulford, of the British Legation, was informed "that Mr. Pritchard-Morgan would certainly be given some Contract as it was felt by the Chinese Government that he had spent a great deal of time and money since he had come to China at His Excellency Li Hung Chang's request."*

This promise was duly observed, and on November 25 a Preliminary Contract was signed by all parties at Peking: the final contract, or "Regulations" as they are called, to follow in due course.

Within four days of the signing of this Preliminary Contract (the same having been filed in the British Legation) Mr. Pritchard-Morgan, accompanied by Mr. J. V. Burn Murdoch and Mr. J. Holton Bush, left Peking for Shanghai, leaving Mr. Hay in charge at Peking. On December 7, Mr. Burn Murdoch (in charge of the first expedition). accompanied by Mr. Bush, Mr. Ferguson, an American, Mr. Everal, and a large Chinese staff left Shanghai for Szechuan.

* Blue Book, China No. 1, 1900, page 44.

The final Contract, or Regulations, were signed on January 30, 1899, and nothing now remained to make them perfect except the ratification of the Throne.

Soon after the departure of the Burn Murdoch Expedition to Szechuan, Mr. Pritchard-Morgan (having in the meantime taken offices for the Administration in Shanghai, the port of embarkation for Szechuan, for seven years) left for England to engage a further staff of geologists and engineers.

On February 28 (within less than one calendar month of the date of the Contract), the Burn Murdoch Expedition reached Chungking, the metropolis of Szechuan, and immediately commenced their work by enquiries as to the mining localities, and put themselves in communication with the British Consul in Szechuan relative to the object of the expedition. On March 31, 1899, the British Consul wrote a letter to the Viceroy informing him of the arrival of the expedition, and on April 18, 1899, the British Consul received a communication from the Viceroy relative to the matter. The Expedition remained in Szechuan, taking an office and awaiting further developments and instructions* from the Viceroy and other officials, and these in their turn were apparently awaiting the ratification by the Throne and advices from Peking.

Details of the work performed by Messrs. Burn Murdoch and Bush were fully set out in the sworn evidence filed in Peking.

Immediately after the Contract became known, M. Pichon, the French Minister in Peking, entered a protect against it being ratified by the Throne on the ground that it was opposed to treaty rights, and that it was in violation of an Agreement which had been entered into between Lord Salisbury and Baron de Courcelles that in the event of England or France getting any privileges or advantages in the Provinces of Szechuan and Yunnan, such privilege and advantages were to be participated in by each Government in equal proportions.

Lord Salisbury, then Foreign Secretary, held that the Contract created purely a Chinese mining administration with a British subject as one of the administrators, and that consequently it was not opposed either to treaty rights of the Agreement referred to.

Mr. Pritchard-Morgan arrived in England in February or March, and immediately opened negotiations with Dr. Jack, LL.D., F.G.S., the Government Geologist of Queensland, to leave the service of that Government, and to proceed with a staff to Szechuan in charge of an expedition to make a geological survey of the province.

On May 8, Mr. Pritchard-Morgan handed the Foreign Office a cheque for £800 to cover the cost of cabling the Contract to England, so that no time might be lost in getting on with the work. All this work was done and all this expense incurred prior to the ratification of the Contract by the Throne, but on July 31, 1899, the British Legation at Peking telegraphed the Foreign Office that the "Morgan Contract has been ratified by the Throne, and is now complete and binding upon the parties."

Immediately thereupon a Contract was entered into with Dr. Jack, who in the meantime had secured the services of two assistants, and they were engaged for a period of three years, Dr. Jack at a salary of £3,000 per annum, and the two assistants at £800 and £700 per annum and all expenses. Mr. Pritchard-Morgan again left for China with this staff in September, 1899, and, believing that the business was now thoroughly launched, left instructions for the formation of a Company to provide capital to carry it to a successful issue.

The Eastern Pioneer Company was formed on October 12 with a registered capital of £300,000, and an opportunity was offered to Belgian capitalists to join in the scheme, the Contract contemplating other nationalities as well as British. The late King of the Belgians was the largest individual subscriber of capital, and was, after Mr. Pritchard-Morgan, the largest Shareholder of the Company.

Mr. Pritchard-Morgan, Dr. Jack, and the second expedition reached Shanghai in October, 1899, and Dr. Jack and his expedition reached Chungking in February, 1900. On March 5 he left for Chengtu, the capital, to consult the Viceroy and Officials, and to carry out his instructions.

On March 23, 1900, at the suggestion of the authorities Dr. Jack entered into a contract to co-operate with the Pao Fuh Mining Company, who had already acquired mining lands, and

View of the Min River above Kwanhien. The river is divided into two channels by strings of boulders enclosed in crates of plaited bamboo.

Mr. Pritchard-Morgan was appointed Foreign President of the amalgamated companies.

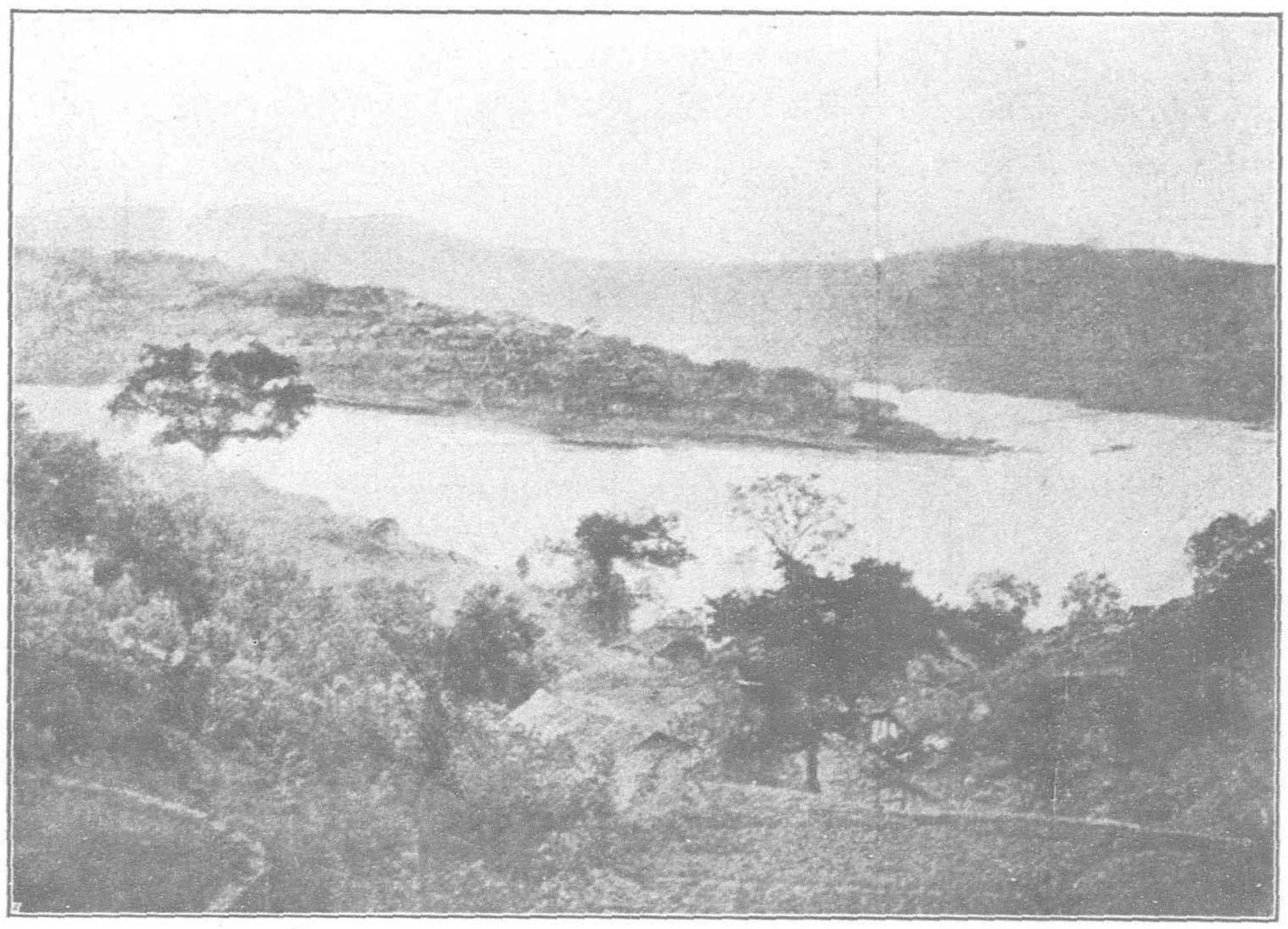
On the March 31 a proclamation was issued by the Viceroy, Tartar General, and Mining Commissioner notifying that Dr. Jack and party were there in pursuance of the Contract and under authority from the Throne, and (accompanied by officials and escort) for the purpose of opening mines, etc. etc.

On April 4, Dr. Jack and party left Chengtu and visited Pen Hsien Copper Mines, returning to Chengtu on April 16, when he reported to the authorities the result of his examinations. He then proceeded to Anhsien, Shihchuen, Lungan, Sungpan, and Tee Chee Ting, where, on May 24, Dr. Jack received a telegram from the Mining Commissioner to return to Chengtu for a conference with the Viceroy. He reached Chengtu on June 2, where a very serious conference took place. It was then arranged, on the suggestion of the Viceroy, that the Yangtsze Valley Company, whose representative, Mr. H. L. Way, was at that time in Chengtu, should join forces with The Eastern Pioneer Company, and that Mr. Way should accompany Dr. Jack and party in their examination of the Ningyuan and Yachow prefectures, and that if possible they should join forces with the Merchant Sharehoiders of the Szechuen Government Merchants Co-operative Mining Bureau. They thereupon left Chengtu on June 16 for Jachow, en route for the Maha Mines, where they arrived on July 13. They made an exhaustive examination of the Maha Mine, and Dr. Jack sent a preliminary report on the Mine to the Eastern Pioneer Company's Office at Chungking on July 19. They continued their examination and on the following day (July 20) a preliminary Contract for the consolidation of The Eastern Pioneer Company

* It will be observed on referring to the Regulations (particularly Clause 4), that we "must wait till the land is properly purchased (by the Chinese authorities) before starting work," and to have attempted actual mining operations would have been a gross breach of the Contract.

The Yangtsze Valley Company, and the Szechuan Government Merchants Co-operative Bureau for working together, as suggested by the Szechuan Authorities, was agreed to, but it was subject to ratification by the Throne. Thereupon the Eastern Pioneer Company and the Yangtsze Valley Company entered into an Agreement for participation with each other for a period of ten years. Dr. Jack and party and Mr. Way and their retinue remained examining the Maha Mine, and were raising and treating stone and actually producing gold when, on August 10 they were compelled by the Boxer rising to leave the country. The office at Chungking had to be closed on this date, and Mr. Bush left Chungking for Shanghai.

The following quotations show that the Jack expedition were working harmoniously with the Viceroy and other Provincial Officials, in pursuance of the Contract up to the 10th August, 1900, when the Boxer rebellion was raging and a price put upon every white man's head. The circumstances of their flight are described by Dr. Jack, LL.D., F.G.S., in his book "The Back Blocks of China:" "Three members of the party (Dr. Jack, Mr. Jack, junr., and Mr. Morris), representing Mr. Pritchard-Morgan, M.P. (who subsequently transferred his interests to the Eastern Pioneer Company), had been at work, chiefly in the Prouince of Szechuan, since the beginning of the year 1900, examining mining properties. They were joined towards the end of June by a fourth, representing the Upper Yangtsze Syndicate. After camping for some time at Maha, in the Valley of Ya Lung, west of the City of Ning Yuan, they left together for Burma on August 10th, in deference to the urgent request of the British Consul at Chungking, and arrived at Bhamo on October 21st."



City of Chungking, built in Rocky Peninsula at junction of the Kai-ling River and the Yangtsze.

"Finally, after long negotiations, we made a contract with the Yunnan Sung Pa Cheong (Yunnan Mail and Wood Oil-Carrying Company) for the transport of the party and our luggage and stores. The goods were to be taken to Chengtu by 36 coolies and a headman, or 'fu-tow,' in 11 days, for 1,100 cash per man for the journey. The three Europeans and the interpreter had riding ponies as well as chairs, and the cook and our three boys had also chairs of an inferior order. We left Chungking on our way to Chengtu on March 5th,"

"Chengtu, the capital of Szechuan, where we spent in all 45 days in March, April and June, is one of the most important cities in China,"

"A remark on the agricultural wealth of the district, and its apparent prosperity, led our host (the Viceroy) to reply that many of his people were wretchedly poor, and that he hoped the introduction of foreign methods, especially in mining, would raise the general standard of prosperity. I said that we had come to Szechuan with the intention of introducing English capital to develop its mineral wealth, if such wealth as had been reported really existed; and that we must, of course, first satisfy ourselves on that point; and that we relied on His Excellency's goodwill to let us do our work under the best conditions. He was good enough to say that he was very favourable to English enterprise that, in fact, the English and the Chinese were 'as one family,' and that arrangementc were in hand for putting every necessary official and military assistance at our service wherever we might travel through the Province. That these promises were not mere empty compliments was abundantly proved during the five months of our stay in China."

"During our three sojourns in Chengtu we were in constant communication with His Excellency Li Cheng Lung (Imperial Commissioner for Mines), and the members of the Szechuen Mining Bureau."

"The arrangements made by the Viceroy, in conjunction with the Tartar General, for our protection while travelling through the Province seemed at first over elaborate, and to have a tendency to make us ridiculous; but they proved to have been based on a knowledge of Chinese conditions, and stood the test in the troublous times which followed."

"Our first excursion from Chengtu was to the Copper Mines of Tung-Ling-Tse (Eastern Grove Monastery) and back, a journey covering 124 miles."

"At Shaa Ba (July 11th) I received a telegram, dated July 2nd, from Chungking, informing me that the German Minister had been murdered in Peking, and that the situation was very serious. There were also letters from a friend in Chengtu, dated July 3rd, which informed me that the Viceroy had been very anxious about our safety, and had consulted Li Cheng Yung, the Commissioner for Mines, who gave it as his opinion that the Maha district was for the present safe, and that our best course would be to finish our work as quickly as possible, and then return to Chengtu. We decided to go on with the business."

"We were received by the Wai-Yuan and other officials in charge of the branch of the Mining Bureau, in their office, which is a converted temple ..... We camped for the night at the native reduction works on Ko-Lo Creek, a tributary of the Ya-Lung, where 80 head of stamps, driven by 40 overshot water-heels, were at work crushing stone from the Maha Gold Mine."

"An ascent of 400 feet and descent of 1,000 feet brought us (July 13th) to the modern mill attached to the Maha Mine; and here we made our headquarters till August 10th, examining the Mine and exploring the neighbourhood. The erection of a Huntingdon Mill or, rather, the transport of its heavy parts to such a position as this, is an enterprise which must have severely taxed the patience and ingenuity of the manager, Mr. Tong Sing Kow."

"On July 29th a bombsheli feli into our camp in the form of a telegram from our correspondent at Chungking, dated June 30th, which, when translated from the cipher, read as follows:— "Revolution increasing. All women and children withdrawn from river ports. British Consul most strongly advises you to go to Burma. Europeans and Consuls ready to leave Chungking at a moment's notice. It is probable that all foreigners at Peking have been killed."

"The mail brought amongst other things a telegram, dated July 27th, from our correspondent in Chungking. It read:— "Foreign Office, London, telegraphed yesterday instructions take steps remove all British subjects from China."

"Within ten minutes of the receipt of this despatch we had said adieu to our good friends in Maha and started for Burma (August 10th) in a heavy downpour of rain."

On November 7, Dr. Jack prepared his full report on the Maha Mines to the Eastern Pioneer Company, and Mr. Way at the same time prepared his report to the Yangtsze Valley Company, which reports reached England in December.

As soon as order was restored, Mr. G. Jamieson, C. M. G., in Peking, and Mr. Archibald Little, in Szechuan, resumed their position as Agents of the Companies, and the Chinese then suggested modifications of contracts and new contracts, and continued to do so until November 23, 1901, when regulations for the establishment of an Anglo-Chinese Szechuan Company for the joint mining of petroleum, coal and antimony was signed in Szechuan. Further negotiations in Peking and in Szechuan continued until January 9, 1902, when Mr. Jamieson, in Peking, handed to Sir Ernest Satow, the British Minister, a memorandum respecting the Maha Mines, and also the prefectures of Ningyuan and Yachow which the Szechuan authorities had suggested to Mr. Little should be given in lieu of the "Morgan Contract."

Sir Ernest Satow took certain action in the matter but nothing resulted. The negotiations still continued with the two Agents in Szechuan and Peking, and ultimately another Agreement was entered into on February 11, 1903. This was a Preliminary Agreement known as the Ningyuan Agreement. This Agreement proposed to make void the "Morgan Agreement" and extinguish the Hwa Yi Company, and give the rights in the Prefectures referred to in lieu of the "Morgan Contract." This Agreement was to take effect on its ratification.

On the May 6, 1903, Mr. Jamieson cabled from Peking that the Agreement of February 11, which the Chinese proposed should be substituted for the "Morgan Contract," required the consent of the Eastern Pioneer Company and W. Pritchard-Morgan. Both the Company and Mr. Pritchard-Morgan declined to accept the New Agreement in lieu of the Original Contract.

The Russo-Japanese War was carried on in Chinese Territory during this period (1904-5) and it could not be expected that British or other capital would be invested.

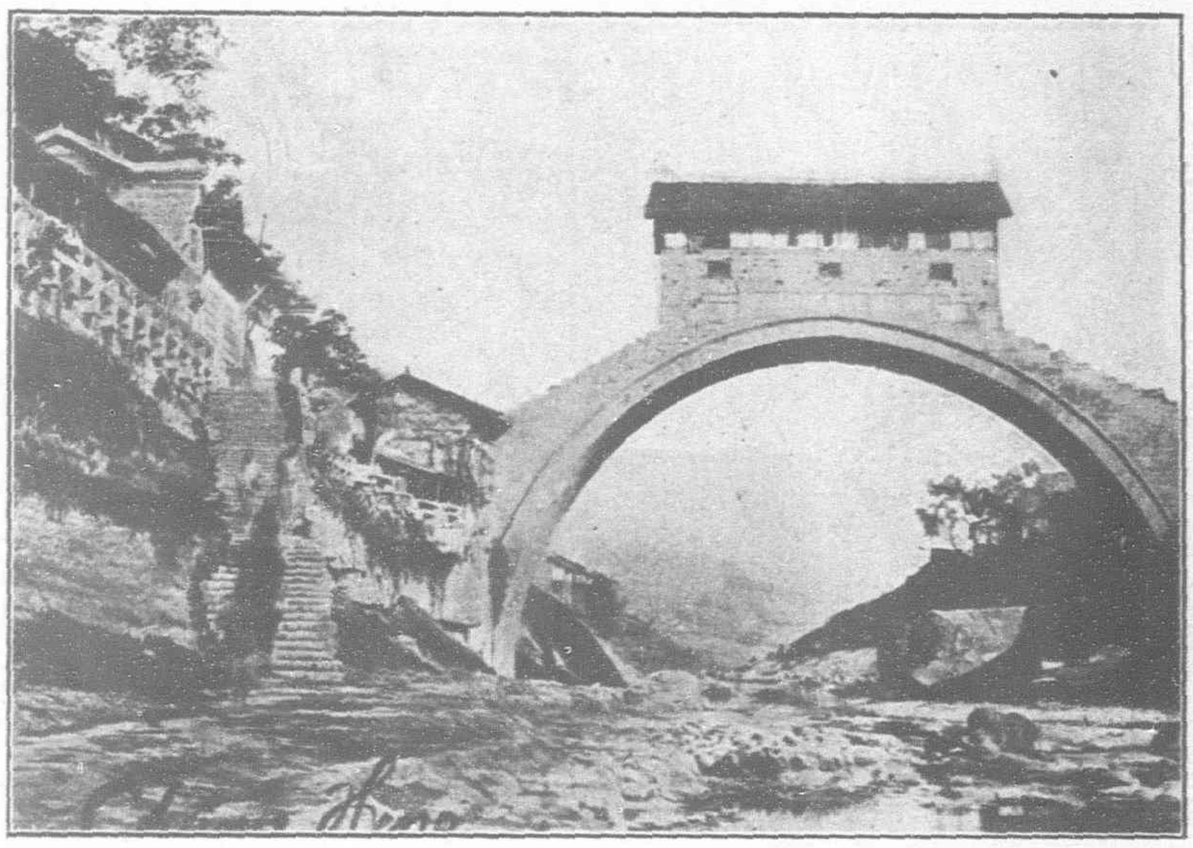
Mr. Little continued his negotiations in Szechuan up to about June, 1905, endeavouring to come to terms satisfactory to all parties, but without avail. Mr. Jamieson, C.M.G., continued his negotiations in Peking until about January, 1906, representing the Companies and striving to obtain the same object but without success.

At the end of 1905, when the War between Russia and Japan had terminated and China appeared to be settled down, the Eastern Pioneer Company resolved to endeavour to resume operations, and on January, 2, 1906, notified their desire to the Foreign Office and requested them to be good enough to inform the Chinese Government to that effect, and to obtain from them guarantees that protection should be secured for the lives of their employees and the properties of the Company.

The English Government acceded to this request and in January, 1906, opened negotiations with the Chinese Government on the subject. Considerable correspondence ensued between the two Governments from January, 1906, up to December, 1907, when the Chinese Government postitively refused to allow work to be resumed on the ground, as they alleged, that work had not been commenced within six months of the date of the Contract.

On December 24, 1907, the Chairman of the Company (Col. Weatherall, C.B.,) the Managing Director, Mr. Pritchard-Morgan, and Mr. J. V. Burn Murdoch left for Peking, and, Mr. J. Holton Bush having joined the party, they all arrived in Peking on February 11, 1908, and evidence of a strict compliance with the Contract was sworn to and filed in the British Legation and forwarded by the Legation to the Chinese Government. Considerable correspondence again passed between the Legation and the Government, and when the Chinese were pressed as to the cancellation of the Contract they stated it was cancelled six months after its date. The reply to that was that it was ratified by the Throne 14 days after its alleged cancellation, that no notice was ever given to the Company or to Mr. Pritchard-Morgan the Foreign Assistant Director appointed by the Szechuan Mining Bureau, or the British Legation, that it had been cancelled, that many months after its alleged cancellation the Viceroy of Szechuan and other Officials had issued a Proclamation that the Company were there at work under the Contract, that the Contract having been ratified by Edict from the Throne, nothing short of another Edict from the Throne could cancel it, and that in August, 1900, Dr. Jack and his party were carrying out the instructions of the Viceroy and officials, in pursuance of the Contract.

All arguments failed, but the Legation still pressed the Chinese to consider the matter up to September, 1909, when Sir Edward Grey proposed Arbitration. To this the Chinese definitely refused to agree, whereupon Sir Edward Grey requested the Company to make out a claim for compensation, which claim he promised would receive the support of His Majesty's Government. The British Minister filed this claim, and the Chinese have now declined to pay the amount, stating that the Contract ought to be cancelled because work was not commenced within six months of the date of the Contract. The letters of the Viceroy and other evidence prove conclusively that the Company had been continuously at work from February 28, 1899 (when the first expedition arrived in Szechuan)—the final Contract being signed January 30, 1899—up to August 10, 1900, when they were compelled to leave.



A Bridge at Chungking.

During the progress of these negotiations the Eastern Pioneer Company often suggested the formation of an International Combination to work under the contract, pointing out that inasmuch as an International Combination was being formed for the building of the railways towards Szechuan, an International Combination for the working of the mines and industries of that province would be desirable.

The International Railway Combination being now complete, the Eastern Pioneer Company was desirous of enlisting the sympathy and support of His Majesty's Government in the formation of an International Combination for working the mines and industries of the province. The representatives of the Company who were still in Peking awaiting some solution of this question were strongly advising such a combination, and the Directors of the Company holding the rights were extremely desirous that such a combination should be formed in preference to receiving the compensation demanded.

The proposed international combination did not develop, however, the Chinese persisting in their attitude of not recognising the old contract. For some time the question was left in abeyance but ultimately a series of questions, asked in the House of Commons, and inspired by the conclusions of negotiations with the Standard Oil Company stirred into activity the Foreign Office, who instructed the British Minister in Peking to again take the matter up with the Chinese Government.

As a result of interviews the Chinese Government agreed to negotiate a new agreement, and, as stated above, these negotiations are still proceeding, but the result will probably be a limitation of the scope of the Company.

The following is the original agreement granted to Mr. Pritchard-Morgan on April 14, 1899:

THE 1899 AGREEMENT

1. The Szechuan Mining Bureau establishes the Hua Yi Company, by whom an Agreement is drawn up with the Hui Tung Company that the work is to be done by Chinese and foreigners conjointly to their mutual benefit. Profits are to be divided proportionately, so as to avoid trouble and disputes.

Both Companies shall obey all the Regulations mentioned in the Agreement and the existing Rules memorialized and adopted by the head office.

2. The Hua Yi Company is to subscribe a sum of 1,000,000 taels for the purchase of land. This must be Chinese and not foreign money.

This Company is to buy and own all mining lands and carry out all negotiations. The Hui Tung Company have no interest in the prices of land, whether dear or cheap, nor with the amount of capital spent or reserved. When the Hua Yi Company has bought the land obtained the right to open mines, the same is to be handed over to the Hui Tung Company for working. In the Hui Tung Company there are foreign merchants; they are not to be allowed to buy mining property from any other Chinese, so as to avoid all complications.

3. The Hui Tung Company, with a Chinese Managing Director and a foreign Assistant Director, is to prepare a working capital of Tls. 10,000,000, to be formed first of 50 per cent. Chinese Shares and next 50 per cent. of foreign shares.

Shareholders of all nationalities are allowed to take shares out of the 50 per cent. allotted to foreigners. There can be no monopoly for any one country. Now, Mr. Morgan, an English merchant, has taken shares, and undertakes to assist in carrying out the work. Shareholders of all other nationalities who should hereafter take shares will be supplied with share certificates, paid dividends, and refunded capital according to the number of shares they take. Should any other country also start a Company on the same lines, with both Chinese and foreign Shareholders, the mines of the one Company will have to be kept distinct from those of the other. Different Prefectures and districts will be granted to each Company in work in, and their proceedings should be regularly reported to the head office, but the Rules and Regulations of this Agreement must, however, be complied with by all to prevent any unfairness. Any Company composed of foreign shareholders only and no Chinese shareholders shall not be allowed to work any mines.

4. The Hui Tung Company is to send out mining engineers to find out what mines are worth opening. This Company is then to consult with the Hua Yi Company to make maps and insert explanations, and submit the same to the Mining Bureau of Szechuan. If these mines are not already being worked by officials, gentry, or merchants, and if they are not injurious to the place, land is to be at once bought; such land is only to be enough for the shafts and the necessary buildings. If the lands belong to the people, the lease or purchase shall be made by the Hua Yi Company by arrangement with the owners for a reasonable price. It can also be taken as a subscription of capital, and a proportionate value of shares granted to the owner. If it be public property, such as a monastery, temple, etc., the owners have the option of leasing it, renting it, or subscribing it as capital. The Hui Tung Company must wait till land is properly purchased before starting work, and no compulsory purchase or seizure of the land will be allowed.

5. After each mining property is bought by the Hui Yi Company, it is to be handed over to the Hui Tung Company for working. From the mines worked by the Hui Tung Company, such as coal, iron, petroleum, etc. the Hui Yi Company is allowed to collect rent at the rate of 5 per cent. on the value of the output, no matter whether such mines make money or not. To reckon the producing capacity and the prices of products, whether dear or cheap, the rent is to be paid on the real price at which the Hui Tung Company sells the products. The value must not be under estimated, and any undue advantage gained. With regard to gold sand obtained from gold mines, a rent of 5 per cent. will be charged on the pure gold obtained after the gold sand has been thoroughly washed, but not on the sand before it has been washed.

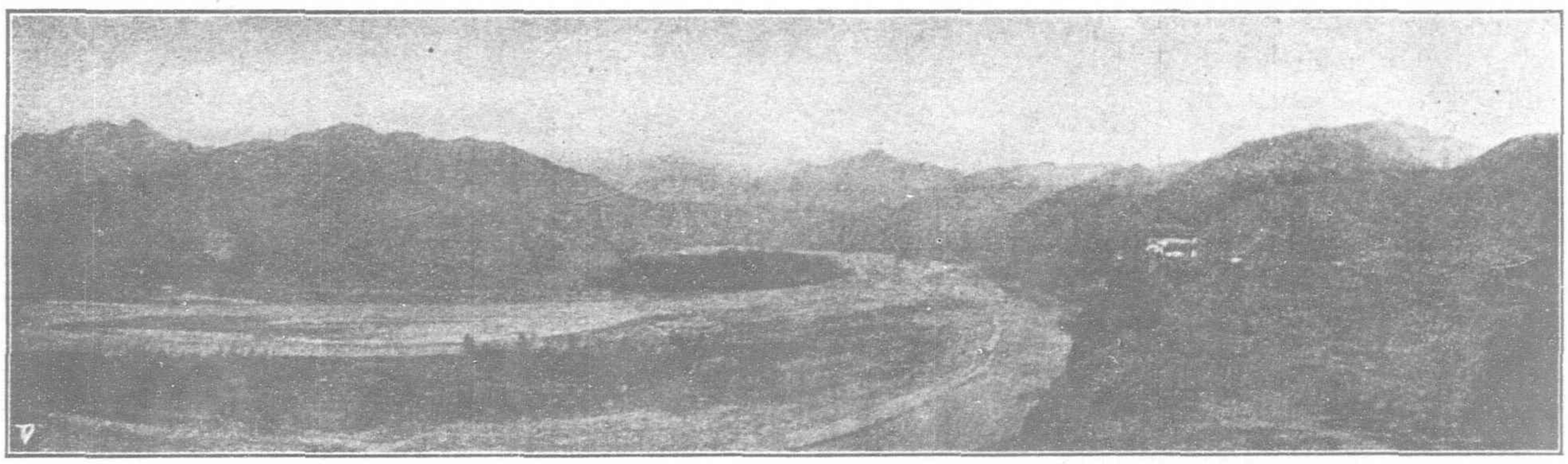
6. Of the mines worked by the Hui Tung Company, such as coal, iron, petroleum, etc., there shall be paid to the Chinese Government, as producer's tax, 5 per cent. on the value of the output of the mines. Export duty shall be paid according to the existing Rules now in force. The Szechuan Mining Bureau shall authorise the Hua Yi Company to collect the producer's tax and to compare the same with the rent, and thus there will be no difference or shortage. No officer shall be deputed for this purpose, so as the save unnecessary expense. The export duty is to be collected by the custom house, and after the export duty is paid, no inland likin dues will be required. As regards the taxes to be charged on precious metals of all kinds, they are to be decided by the Board of Revenue.

7. The Hui Tung Company is to send engineers to find out all the mines that are to be opened and to consult with the Hua Yi Company, which submits the same for the approval of the Mining Bureau. Should a mine be found in a Government hill, the opening of which will not be injurious to the place, permission will be granted to open it. The ordinary land tax on such land would, however, be too small a sum for the Company to pay the Government for its use. In the case of Government land, therefore, the 5 per cent. rent and the 5 per cent. producer's tax are to be collected at the same time, and both paid to the Chinese Government; but 10 per cent. of the rent is to be reserved to pay the expenses of the Mining Bureau and the Hua Yi Company. The Hui Tung Company is to pay the export duty.

8. The area of Szechuan is very extensive, and all sorts of mines exist. Chinese who work on their own property are only required to obtain the necessary permission, pay the necessary taxes, according to the Rules in force, and they are in no way restrained. But if foreign merchants undertake to work the mines, their operations must be limited in some way or other. They must confine themselves to certain intendancies, prefectures, or districts, and not take the whole province as their sphere of work. Now work must be started in the interior first, and at the boundaries afterwards. The Hui Tung Company shall then send engineers to find out first where are mines to be opened and what mines they are; if the same be in districts apportioned to savages, the Hui Tung Company must wait till they find out whether the advantage will be greater than the injury, and devise other means to open them. The Hui Tung Company in such event cannot compel the Hua Yi Company to buy the land quickly and hand it over for working. Any possible cause of disturbance must be avoided.

9. When prospecting for mines, if any boring or sinking of shafts be necessary to examine mineral deposits, an arrangement should first be made by the Hua Yi Company with the land owner for the Hui Tung Company to compensate him according to market prices for any crop, etc., injured. After the mines are opened, should there be any damage to life or buildings caused by land-slips or subsidence in the mines, the Hui Tung Company shall make charitable compensation. If after mines are opened cemeteries or mortuary shrines are met with, some plan must be devised to avoid them if the owners do not like to remove them for money given; no excavation will be allowed. In excavating, as long as the galleries dug below the ground are not injurious to the soil above, rascals are not to be allowed to obstruct the work on the grounds that it is injurious to "Feng Shui." Local authorities must be applied to for protection. The Hui Tung Company is not, however, allowed to claim compensation on these grounds in case it cannot succeed.

10. Whenever it may be necessary to make roads, build bridges, open or deepen rivers, erect sheds, make tools, or other necessaries for mining purposes, and land is required for such purposes, the Hua Yi Company is to buy the land and the Hui Tung Company to pay for it. If water power is required for machinery, and enormous work is done on it, no other person is allowed to make use of it. If branch railways have to be constructed in order to connect the mines with the usual trade routes, a thorough survey must be made of the proposed lines and maps drawn with explanations attached. These must be submitted to the Mining Bureau, which will forward them to the Szechuan Viceroy and head office at



A View of the Min River as it emerges from the Azure Wall range, showing on the right, the temple dedicated to Liping initiator of the Kwanhien Hydraulic Works, about B.C. 250.

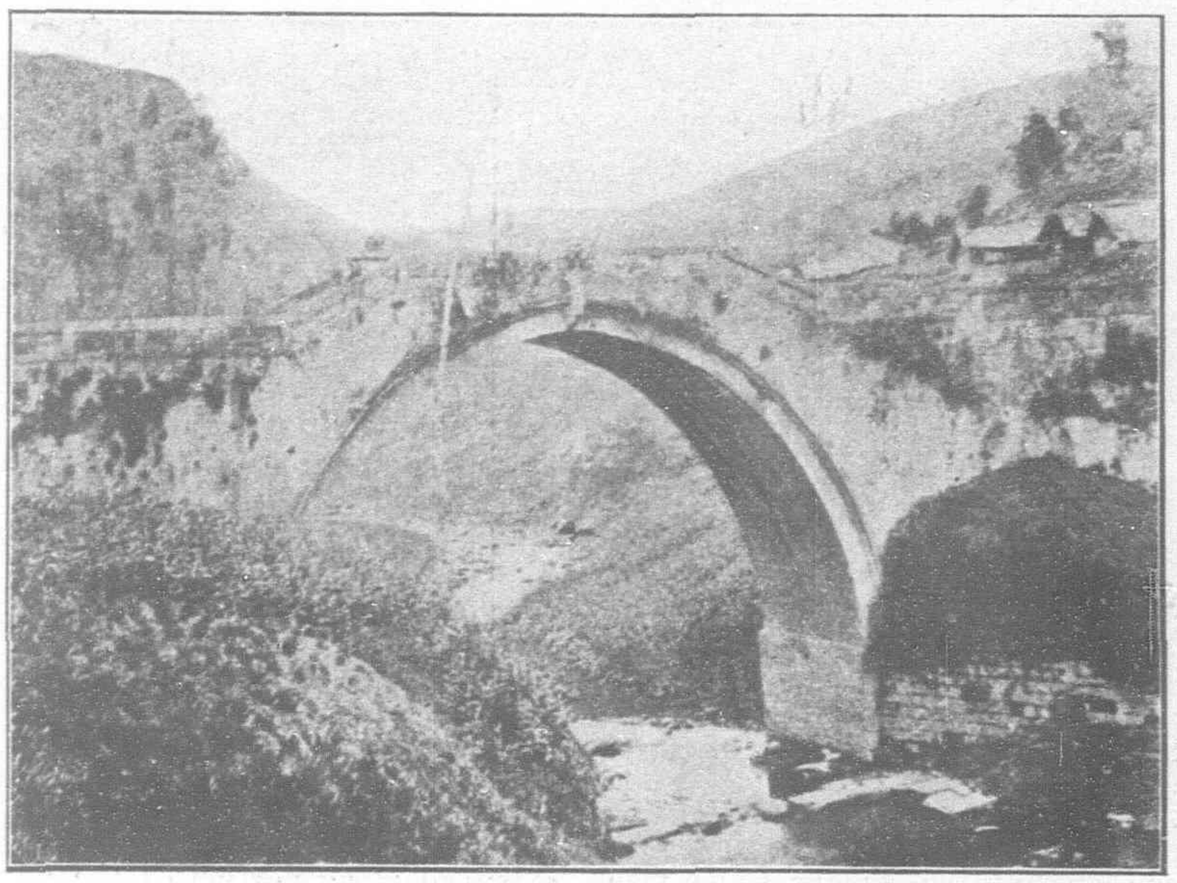
Peking for record and sanction. Nothing of the kind should be undertaken without such sanction. If telegraphs and telephones are wanted for connecting the various mines, the same are to be submitted to the Mining Bureau for approval.

11. The Hua Yi Company is to deal with all matters of negotiation, and the collection of rent and taxes; the Hui Tung Company to superintend and work all mines. Each has its own sphere of work, but each Company may inquire into the other's affairs. A Chinese Manager and a foreign Manager should be appointed for each mining work, whose salaries shall be paid by the Hui Tung Company. The majority of the overseers should be Chinese, and all the miners natives of the province. All are to receive adequate wages, and further Rules must be made on this subject by the Hua Yi and Hui Tung Companies. Later on, the Mining Bureau should instruct the Company to select for important positions any Chinese who may have become proficient in mining engineering. They are to be treated the same as foreigners, to encourage improvement.

12. On opening the mines, the Hui Tung Company shall establish a School of Mining and Railway Engineering in some locality convenient to the mines, and there shall be selected twenty or thirty promising youths by the local officials and gentry to study in this school, under foreign instructors, and be thus prepared for future employment on railways and mines.

13. At places where mines are opened, the Mining Bureau should apply to the local authorities for protection. Such mines should also obey their rules, and enrol volunteers to guard against thieves, etc. If the natives shall enrol themselves as volunteers of their own accord to protect the localities, the Hui Tung Company should also subscribe towards their expenses.

14. The Mining Bureau, acting as intermediary between the superiors and subordinates, is to attend to all negotiations between natives and foreigners and matters of protection. The work involved, as well as the expenses, will be great. The Hui Tung Company should therefore start work within three months after the signing of this Agreement, and pay the Mining Bureau the sum of Tls. 100. per month for its working expenses for each mine, reckoning from the day when work is started. There will be no other charges besides this. If work be not started after six months this Agreement is considered cancelled, and the Hua Yi Company will be at liberty to invite other merchants to take up the work. It will be no concern of the Hui Tung Company.



Bridge East of Ning Shih, Yangtsze River.
(From Logan Jack's "Backblocks of China.")

15. The Hui Tung Company shall work all the mines according to the existing Rules adopted by the head office. After paying the producer's tax and the export duty, if there should be a profit by the annual accounts, there shall first be paid 6 per cent. interest on the capital employed, next 10 per cent. of the remainder of the profits shall be set aside as a sinking fund for the yearly repayment of capital and consequent reduction of interest, payments to sinking funds when the invested capital is wholly repaid, and from the remaining net profit 25 per cent. shall be paid to the Chinese Government, and the remainder shall go to the Hui Tung Company for its own disposition.

16. The Hui Tung Company is to open not one mine, but a large number. The accounts and profits of each mine must be kept distinct from the others; the gains of one mine should not be made to offset the losses of another, and so cause the Government income to suffer reduction.

17. At the end of every year, the Hui Tung Company shall make up distinct accounts of the different mines, whether profitable or not, and the same must be audited by the foreign and Chinese Managers, and when found correct, a printed account of profit and loss shall be rendered by each mine to the Mining Bureau for approval. A general account of profit and loss for all the mines shall then be prepared and submitted to the head office at Peking, the Board of Revenue, and the Viceroy of Szechuan for audit. Payments due to the Government shall be remitted at the same time. The report shall show the real amount of money due to the Government in order to avoid all discrepancies in the accounts. The Chinese Government and the Hua Yi Company are not to be held responsible in case of loss.

18. The Hui Tung Company is to have control of all the mines opened by them for a period of 50 years, reckoning from the date on which each mine is opened, on expiration of which term all the mines, whether profitable or not, shall with all plant, machinery, materials, buildings, roads, and all proporty acquired by the capital of the mines, be handed over gratis to the Chinese Government without asking for compensation, and in due time the Mining Bureau of Szechuan shall report to the head office at Peking, and the Viceroy of Szechuan shall send Deputies to take delivery of the same. The land rented by the Hua Yi Company shall be handed back to the original owners.

19. The Hui Tung Company being formed of Chinese and foreign shares shall, at its own choice, sell and buy its shares according to the fluctuation of the market rates. If the Hua Yi Company, or any Chinese gentry or merchants, shall, within the said term of fifty years, acquire three-fourths of all the shares in the Hui Tung Company, the mines may then be taken over from the Hui Tung Company, and the Mining Bureau shall report upon the same and direct the said shareholders (merchants) to take charge of the mines.

20. Should any mines opened on land bought by the Hua Li Company and handed over to the Hui Tung Company, be stopped on account of no profits being made, and the rent cease to be paid, then the Hua Yi Company has the option of adopting other means to open such mines, or use the land for any other business. This of course, is to prevent the money spent on the land from being wasted and, consequently, has nothing to do with the Hui Tung Company.

21. If the Hui Tung Company sends out engineers who discover certain mines in certain places, and report the same to be rich, but cannot guarantee the same, and it is exceedingly difficult to purchase the necessary land for working such mines, the Hui Tung Company should in such cases pay the purchase-money for the land to the Hua Yi Company, who shall have the said land purchased and handed over for working. This will prevent the purchase-money being wasted. If a mine is discovered in the land purchased, the price paid for the land will be repaid to the Hui Tung Company by deducting the rent of 5 per cent. until the whole purchase-money is paid off, when the Hua Yi Company shall again collect the rent of 5 per cent. as usual. Should there be no mine in the land purchased, no rent shall be payable to the Hua Yi Company, and the Hui Tung Company, being unable to recover the purchase-money, shall not deduct the same, with interest, from any other mine. This is agreed to by both parties and a further guarantee will be given at the time.

22. All machinery, materials, and supplies needed for the mines opened by the Hui Tung Company shall, on importation, be subject to the Rules in force for the Kaiping and other Mining Companies, and pay one full duty and one-half duty to the Maritime Customs, and shall be exempt from all inland likin dues.

23. These mines being under the sovereignty of China, should China ever be at war with another country, the said Company shall obey the orders of the Chinese Government, and grant no aid to the enemy.

24. The Hua Yi Company and the Hui Tung Company shall obey all Rules and Regulations adopted and memorialized by the head office, even if the same be not stipulated in this Agreement.

25. This Agreement with Regulations agreed upon, shall be made out both in Chinese and English, in eight copies, to be signed by Director Li Tai Ching, of the Hua Yi Company, and foreign Assistant Director Morgan and Chinese Assistant Director Liu Hsio Shun, of the Hui Tung Company, and to be sealed by the seal of the Mining Bureau of Szechuan. One copy each of this Agreement is to be sent to the Mining and Railway Board at Peking. The Tsung-li Yamen, the Board of Revenue, the Viceroy of Szechuan, and the Treasurer of Szechuan for reference. Of the remaining three copies, the Szechuan Mining Bureau, the Hua Yi Company, and the Hui Tung Company are to keep one each as proof. If there be any mistakes in the translation, the Chinese text shall hold good.
Signed this 14th day of April, 1899.

GENERAL ELECTRIC CO. OF NEW YORK

The following announcement is made by the Shanghai Municipal Electricity Department:—

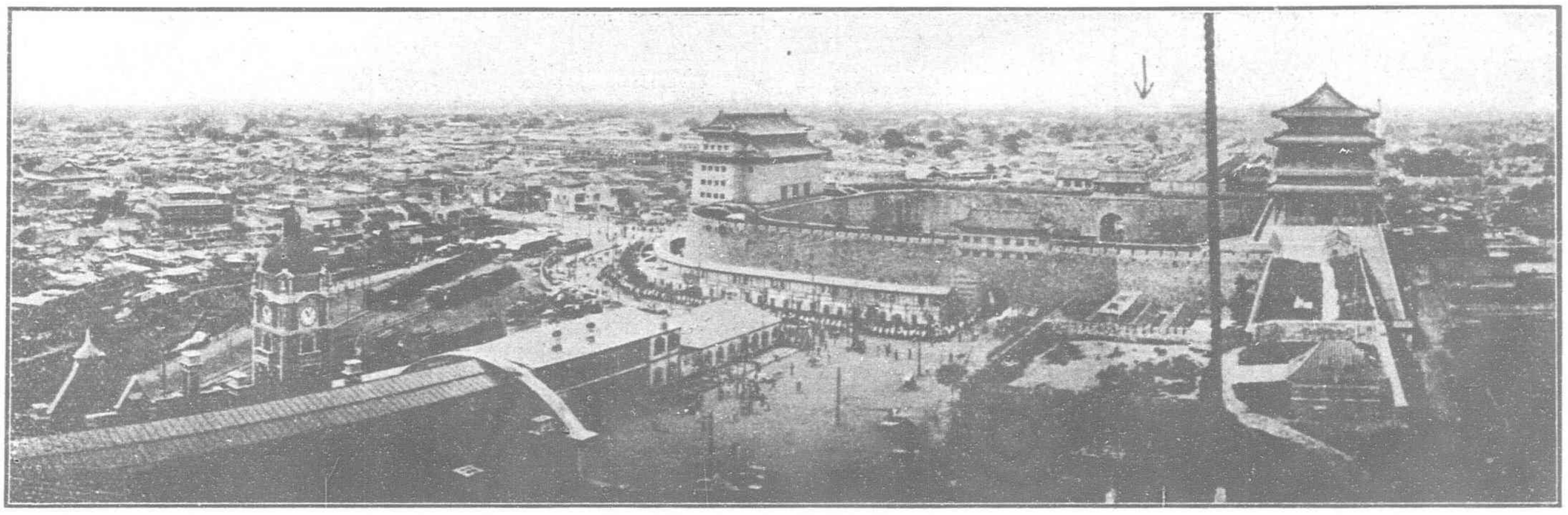
For the supply of six 625 K. V. A. three-phase oil cooled transformers for use in the Central District Substations, to be of the same manufacture and design as those heretofore installed, tenders were invited in London from the General Electric Company of New York and the British Westinghouse Co., Ltd., and the tender of the former, for an improved type of apparatus has been accepted. Details of tenders are as follows:—

Manufacturer	*Price*	*Delivery*
General Electric Co. - -	£2,100 - -	14 weeks
British Westinghouse Co., Ltd.	2,090 - -	14 „
General Electric Co. - -	2,010 - -	14 „

RAILWAY AROUND PEKING

CONNECTING UP IMPORTANT TERMINALS

The Ministry of Communications have at last come to an arrangement with the Peking City authorities whereby they will be able to connect the terminals of the Peking-Kalgan, the Peking-Mukden, the Peking-Tungchow, and the Peking-Hankow railways. Later a Central Railway station will be built at which it will be possible for passengers to take trains over any lines open for traffic from the Capital.

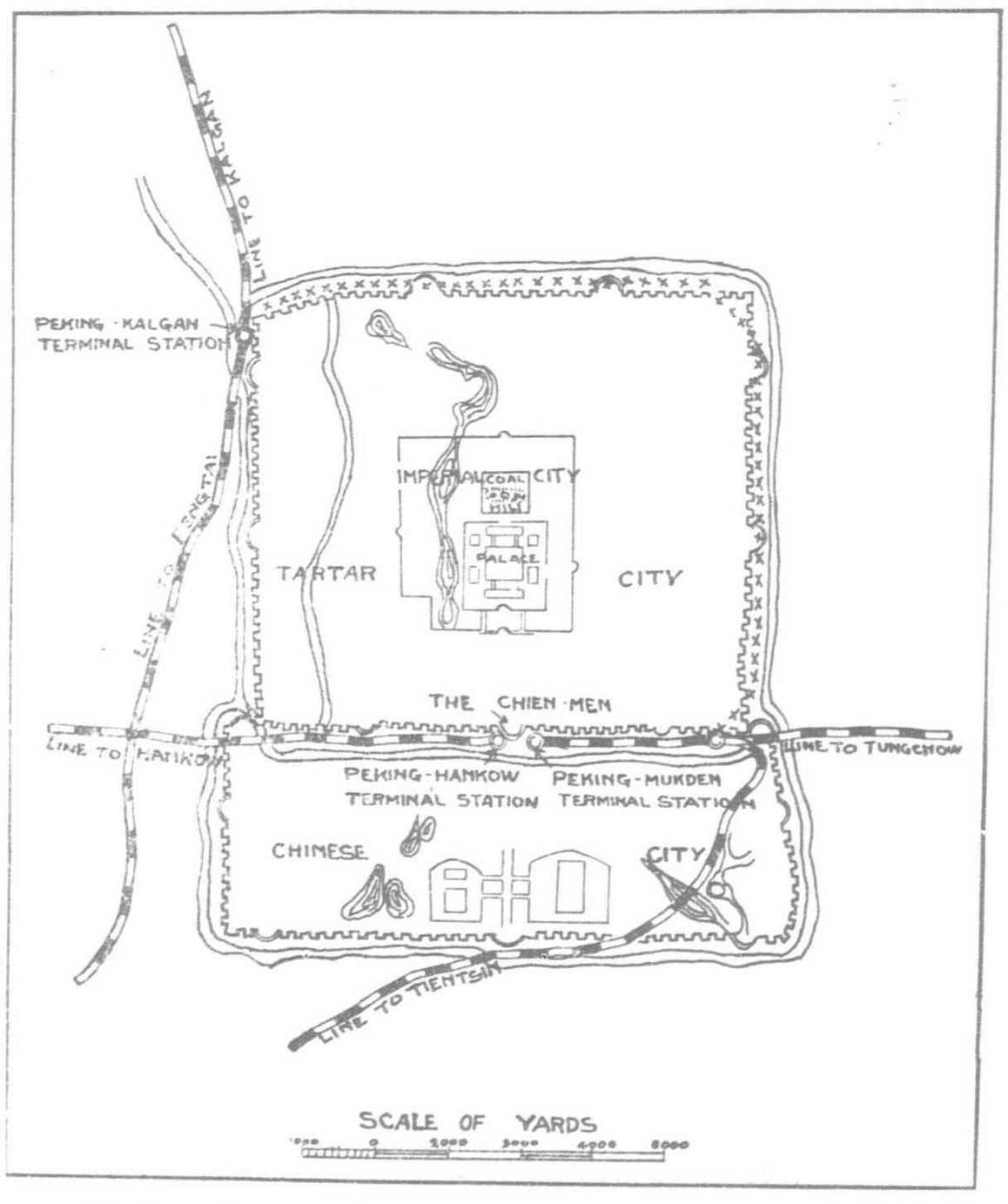


THE CHIENMEN GATE, PEKING.

This unique photograph, taken from the top of the wireless telegraph mast on the wall behind the American Legation, clearly shows the system of construction of the gateways in the Tartar Wall of Peking. The clock-tower in the foreground of the picture is part of the terminal station of the Peking-Mukden Railway, while the arrow points to the terminus of the Peking-Hankow Railway. It is now proposed to remove the intervening walls forming the curtain of the Chienmen Gate, leaving the two gate towers standing. The tower on the right of the picture, is of course, on the top of the main Tartar wall and is the main tower of the Chien-men.

The need for a connecting link between these railways has been felt for a considerable period, and with the effluxion of time and the development of traffic the disabilities connected with the transportation of cargo from one line to the other have become intensified.

Although the terminals of the Peking-Mukden and the Peking-Hankow railways are but a stone's throw from one another, being situated to the east and west of the curtain, or demi-lune, of the famous Chien-men Gate, cars can only be transferred from one line to the other by utilising a connecting link situated some miles from the Capital on either side.



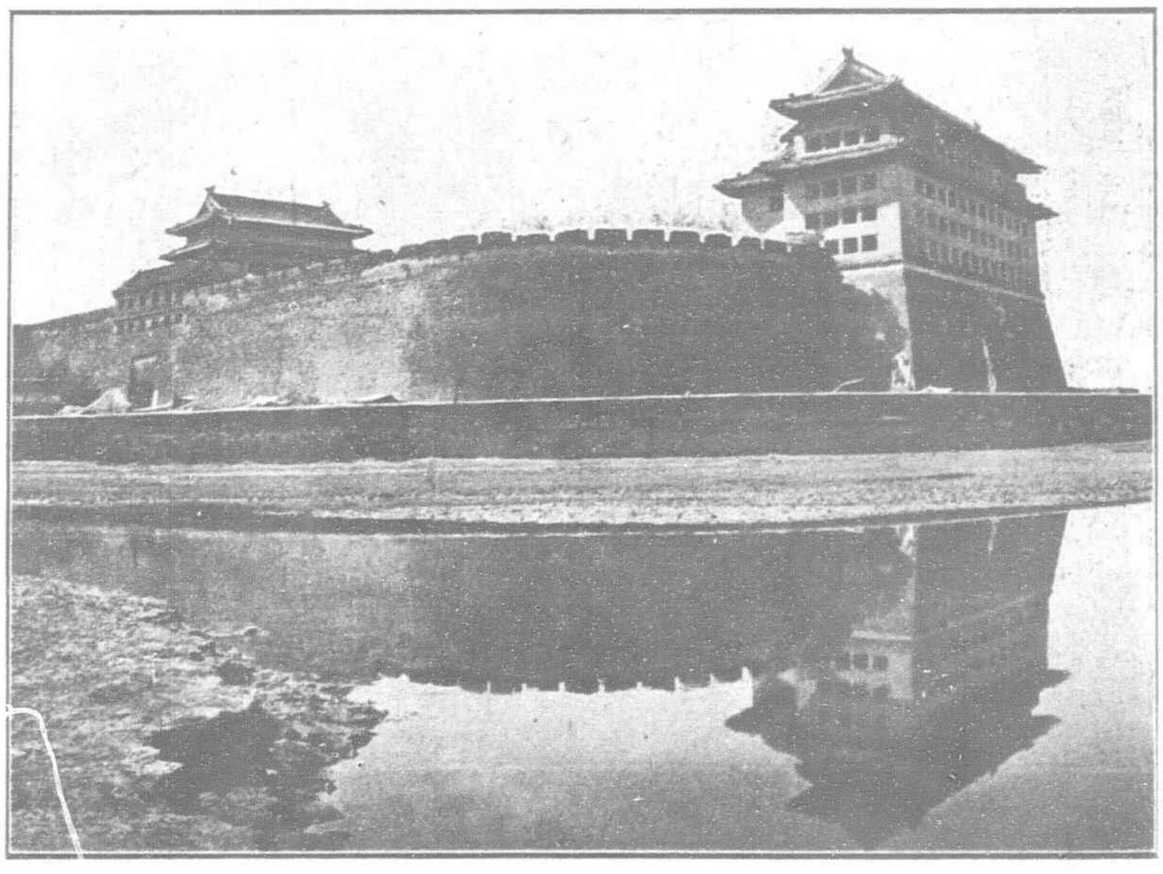
The line of crosses shows the route of the connecting railway.

Similar conditions exists with regard to the Peking-Kalgan railway, though the route is much more round-about than is the case with the other lines.

To overcome this difficulty, and to give passengers greater facilities, doing away entirely with the long and tedious ride across the city to reach the Kalgan railway, it is now arranged to have a line built round the north and east sides of the city which will connect the Kalgan railway direct with the Peking-Mukden and the Tungchow railways, permitting passengers embarking from the Legation Quarter to take the train for either place at what is known as the Water Gate Station, while three new stations will be built on the east and north of the Tartar Wall to accommodate people living in those sections of the city.

What is now the Hsichimen station of the Kalgan railway will be extended along portion of the north-west wall, and the railway will be taken straight along the outside of the wall to the north-east corner where the north and the east walls will be pierced to permit of a serviceable curve being constructed. The line will then run down the east wall and pierce the south-eastern corner to permit of another curve to join with the existing line terminating at the Water Gate Station.

The line will be about seven miles in length and will hug the wall the whole way, being built upon the high land between the moat and the wall. This will necessitate a change in all the gates on the north and east, a matter which gives the city authorities some concern, for they are loath



THE ANTING-MEN GATE, PEKING.

As in the case of the Chien-men the stone curtain shown in this picture will be removed, leaving the tower on the right of the picture, and the one on the left—which is on the main wall—standing.

to allow the architectural grandeur of the wall to be interfered with. They recognise the arguments of the utilitarians, however; and since no better route than what the land beneath the walls provides can be secured

they are willing that the gates shall be altered in order to permit the railway men to have their way.

The engineers find it necessary practically to erase the great curtains which curve on the outside of the north gates, while on the eastern side they will be able to tunnel through the curtains of the two gates and to a greater or less extent preserve their ancient state. On the north the outer gates and towers will be preserved, the city authorities demanding that steps shall be provided so that they may be reached by pedestrians who may desire to climb them.

Between the Tehsheng-men (or Gate of Victory) and the Anting-men (or Peaceful Gate) a new station will be built, while a second one will be constructed between the Anting-men and the eastern corner of the wall. A third will be situated between the Tungchih-men (or Direct East Gate) through which the road to Jehol runs, and the Chaoyang-men (or Gate of the Rising Sun) through which runs the road to Tungchow. These stations will assist to develop the eastern and northern sections of the city, and will give easy access to the railway to travellers to Kalgan who might live in these localities.

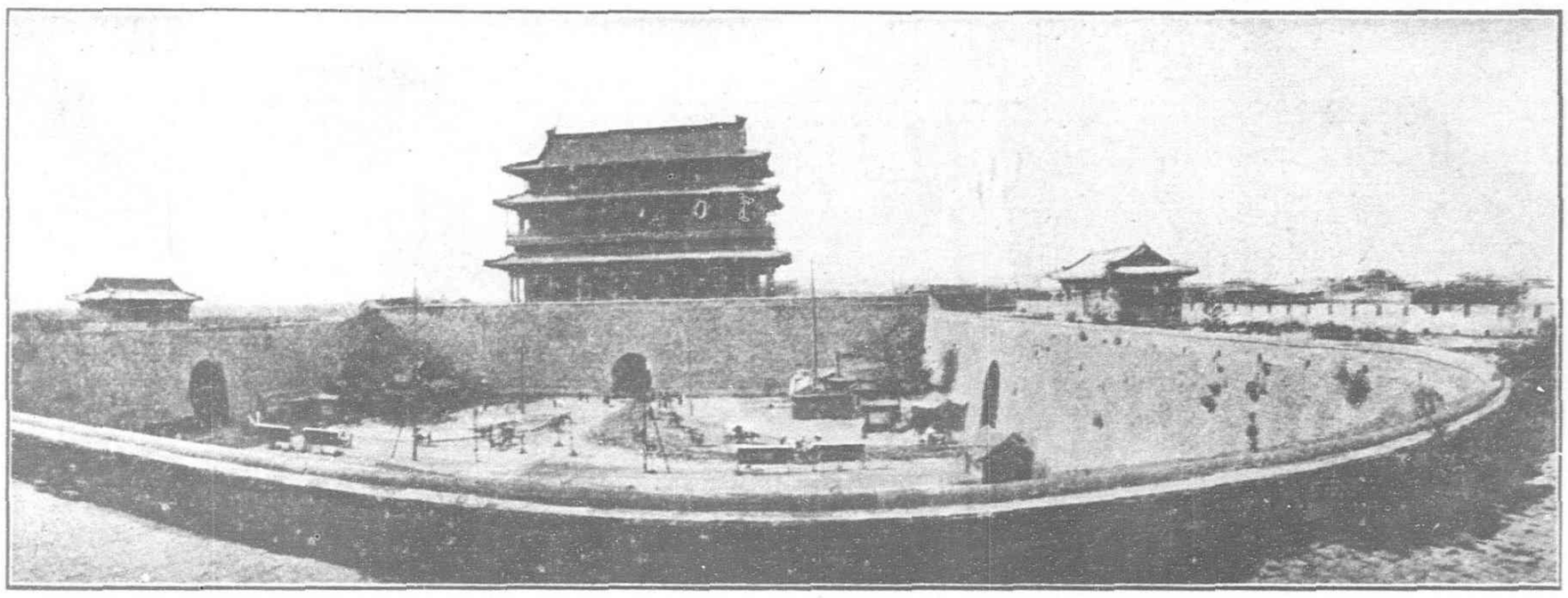
At the south-eastern corner of the city, and connected with the Peking-Mukden railway, is a short line which gives access to the old granaries. Over this spur the tribute rice used to be carried from the main lines to the stores, but as tribute rice has ceased to come to the Capital that spur will no doubt be done away with now that improvements are being undertaken.

The most important alteration which will be effected in connection with the gateways of Peking, and the one which will be regarded with most regret by those whose artistic susceptibilities are always ravaged by the advance of utilitarian projects, will be at the famous Chien-men (or Meridian or Noonday Gate). Here it is intended to pull down the imposing curtain and so create a wide avenue between the Peking-Hankow and the Peking-Mukden railway stations. That the massive grandeur of the chief entrance to Peking will be affected is certain though the fact that the tower surmounting the south gate of the curtain will be preserved, with suitable flights of steps on either side so that it might be reached by visitors, will probably enhance rather than diminish the general aspect. At all events the removal of the wall will certainly be of tremendous advantage in the handling of traffic which is daily becoming a more and more difficult problem.

After the curtain is removed a fine esplanade will exist, and later the Peking-Hankow and Peking-Mukden railways will be connected, by a loop to the south of the outer gate. A central railway station will be erected, somewhere in the vicinity in the future. A site for this important centre has not yet been selected.

To facilitate the handling of traffic in and out of the city two tunnels will be bored through the wall on either side of the existing arch forming the Chien-men. One will be utilised for the proprosed tramways, while the other will be used for passenger traffic. These are absolutely necessary improvements, and will be appreciated by all whose lot it is to have to traverse this section of the city.

The cost of making the Chien-men alterations will be borne by the Peking-Mukden and the Peking-Hankow railways between them, it being deemed that they are the ones who will benefit by the change. The city authorities bear none of the cost of the projected improvements in any part of the city, but they demand that the artistic features of the gateways which will be affected shall not be destroyed or rendered unsightly. The cost of building the line round the north and east walls will be defrayed by the Peking-Kalgan railway, with assistance if necessary from the Peking-Mukden railway funds.



ANOTHER VIEW OF THE CHIEN-MEN, PEKING.

This view of the Chien-men is taken from the small gate tower, and shows the passenge way through the main Tartar Wall, and the main pavilion, as well as the curtain which is to be removed.

It is expected that work will be commenced on the alterations of the Chien-men almost at once, the contract having been signed, and as soon as the city authorities have approved the plans the railway will be commenced. It is expected that within two months of the beginning of work trains will be in operation.

NEW BANK BUILDINGS IN CHINA

The development of foreign banking interests in China is necessitating the erection of adequate foreign buildings adapted to banking purposes in the Capital for those institutions which have not yet accommodated themselves in this respect, and improved premises elsewhere.

At the present time both the Chartered Bank of India, China and Australia, and the Banque de l'Indo-Chine are carrying on active operations in the erection of suitable modern premises at Peking, and it is reported that the Banque Industrielle de Chine and certain Chinese banks are arranging for the erection of buildings on the ground at present occupied by the Ministry of Finance, near the Legation Quarter.

The Hongkong and Shanghai Banking Corporation, the Russo-Asiatic Bank, and the Yokohama Specie Bank have been in their own premises for some years, but others doing business in Peking have been forced to do the best they could with any houses available. Business is growing so fast that make-shift premises can no longer be tolerated, and we would not be surprised to see the International Bank, the Bank Sino-Belge, and others, soon following the steps being taken by the Chartered and French Banks.

The Banque de l'Indo-Chine is erecting its new premises on the site which it has always occupied, in Legation Street, opposite the Russian Legation, while the Chartered Bank of India, China, and Australia has purchased a site at the corner of Legation Street, opposite the entrance of the American Legation.

The Chartered Bank

The lot purchased by the Bank is a narrow one with a frontage on Legation Street of 37 feet and on the Rue Linevitch of 165 feet. The building has been designed to consist of a basement, ground, first, second and attic floors. The exterior will be faced with granite and red pressed brick work, and the first floor will be provided with balconies.

The Basement will comprise a spacious reinforced concrete treasury and sub-treasury, a large fire-proof record room, and several store and clerks rooms, besides the heating chamber.

The Ground Floor will be entirely for banking business, the main entrance to the Banking Hall being at the corner of Legation Street. To the left of the Banking Hall will be a commodious office for the Agent. In the centre of the building will be the Chief Assistant's office, so placed as to give an unbroken view of both the Banking Hall and shroff's office; the latter with the compradore's office taking up the rest of the space on this floor, but having a separate entrance from the north-east corner.

Another entrance on Rue Linevitch will give access to the main stairs of the Agent's residence and junior staff quarters on the first and second floors respectively. The stairs are to be constructed of reinforced concrete throughout.

The servants and kitchens are provided for in the attic floor; and the building will be equipped with complete heating and sanitary plants.

The architects are Messrs. A. J. M. Shaw and C. Thunder.

The Banque De L'Indo-Chine, Peking

The new building of the Banque de l'Indo-Chine, an elevation of which we are able to produce in this issue, is now under construction on the Bank's property in Legation Street, Peking, and when completed, will form one of the most important and up-to-date buildings in the Capital.

The type of architecture adopted for the exterior is of the Ionic order treated along Italian Renaissance lines, and with every detail of the work carried out with a due sense of proportion combined with solidity of construction, the result will give a very pleasing effect, as well as the feeling of protection so essential in a banking establishment.

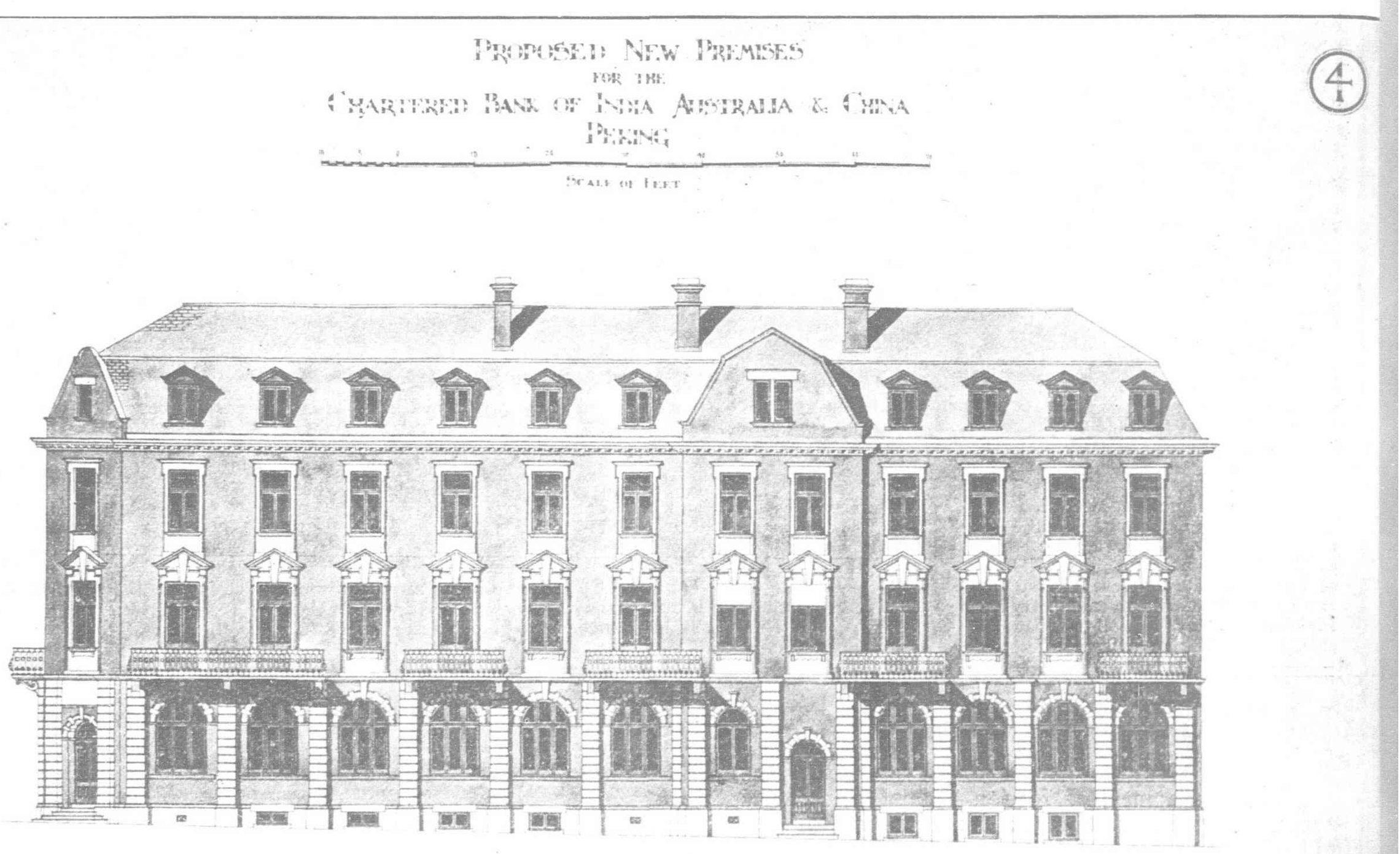
The frontage of the main building is set back about 20 feet from the boundary in Legation Street, along which there will be an ornamental wrought iron railing with wrought iron entrance gates in same giving access to the different parts of the building.

The North and West elevations, being those principally seen, are to be treated with a columnar arrangement of pillars and pilasters in Hsishan stone, with a stone entablature and balustrade over same, while stone is also being used in the lower part of the front and in the central part under the pillars. Stone dressings are also to be used round the windows and doors as well as at the corners throughout. The remainder of the facing is to be carried out with selected quality local red facing bricks. The roof will be a flat one and can therefore be utilised as a roof garden.

The accommodation will comprise, on the ground floor, a large Banking Hall giving ample accommodation for the staff and for the public, and on the right of the space for the latter, there is an office for the Manager with that of his Secretary adjacent. Next to the latter is the private staircase leading to the Manager's residence on the upper floors, while adjoining this there is a large Board room. On the left of the Banking Hall, accommodation is arranged for the Chinese customers of the Bank, as well as for the compradore, shroffs, etc. The first and second floors are arranged as residential quarters for the Manager.

Amongst other accommodation in the basement, there is a large and commodious strong room for treasure, while adjacent thereto, another interesting feature will be the Safe Deposit Vault for the convenience of the public renting lockers for the storage of documents and other valuables, and which will be fitted up with all the most modern fittings.

The whole of the work is being carried out from plans prepared by and under the superintendence of Messrs. Atkinson and Dallas Ltd., Civil Engineers and Architects, 4 Legation St., Peking.

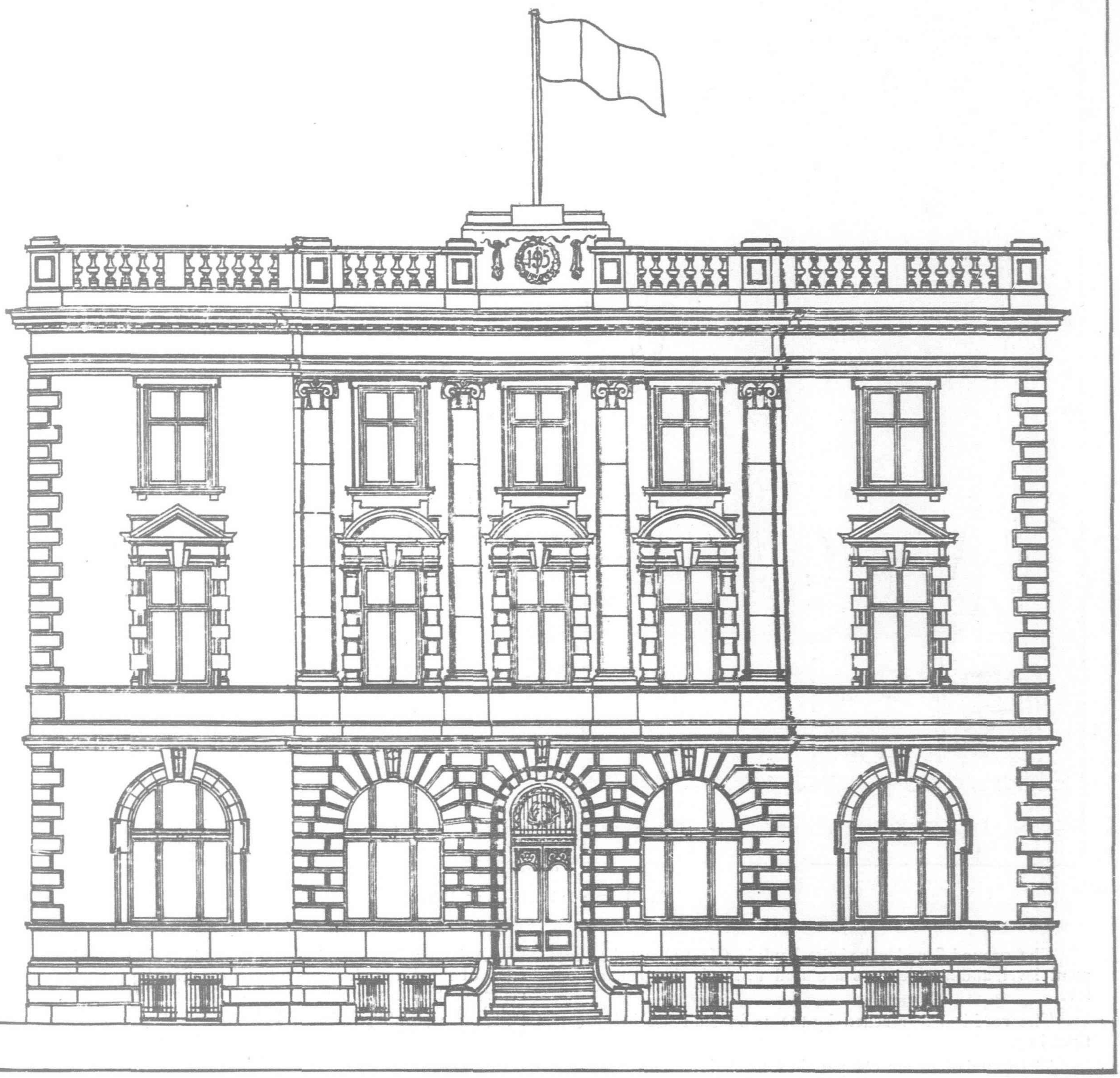


Front Elevation

The Banque De L'Indo-Chine, Shanghai

The new building of the Banque de l'Indo-Chine on the Bund in Shanghai, was formally opened on June 13.

The main entrance to the Bank is in the centre of the building, with Manager and Sub-Manager's offices on either side of

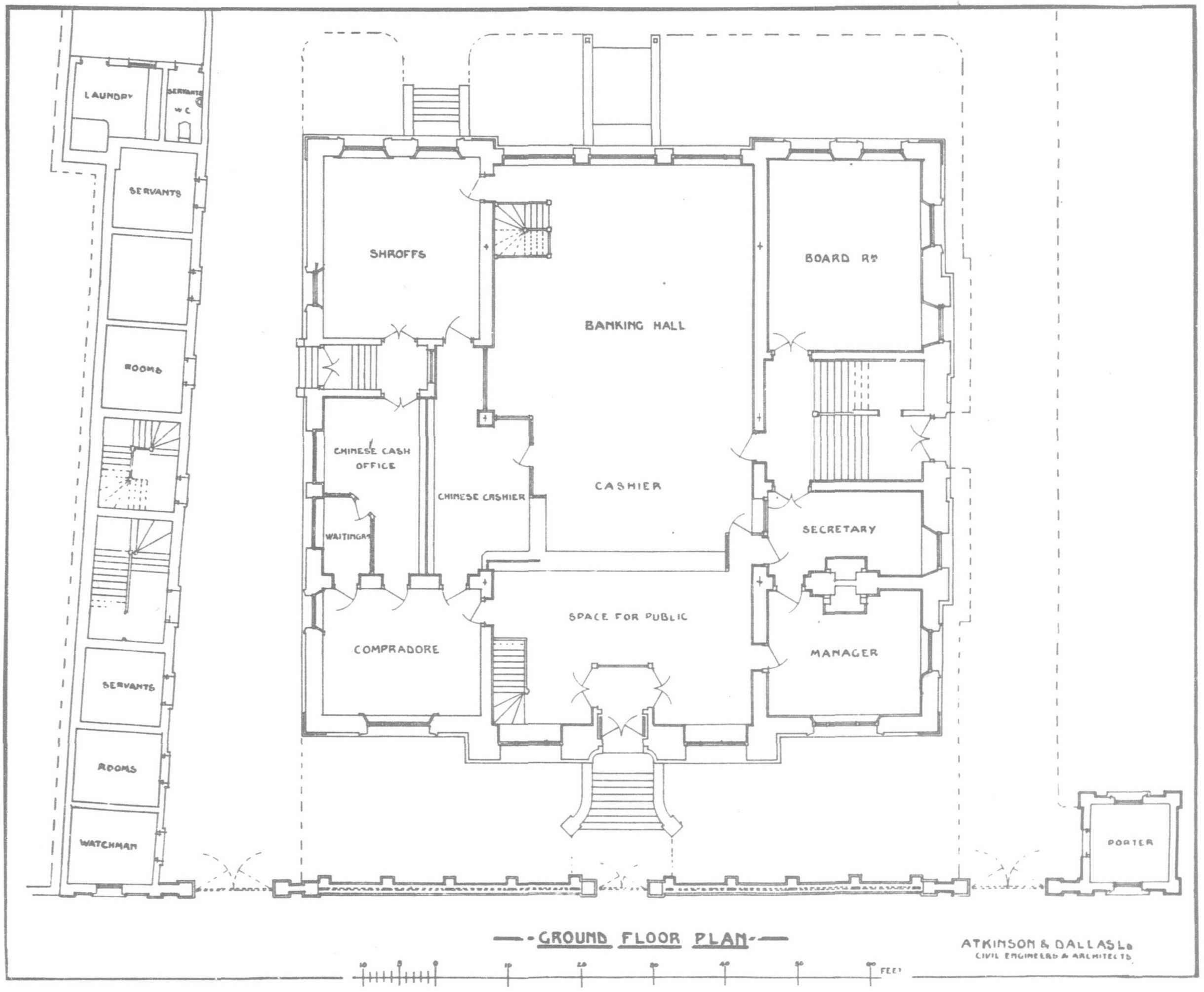


The Banque de l'Indo-Chine, Peking.—Elevation to Legation St. Scale 8ft. to an inch.

the entrance hall. The Banking Hall covers an area of 65′ 0″ × 66′ 0″, with a Waiting Room connecting with the Managers Office and Banking Hall. In the rear of the Banking Hall are the Treasury, which is built in reinforced concrete, and capable of storing five million taels, main staircase to residential flats on first and second floors, Compradore Room and Lavatory. The Shroff's office with servants quarters over are arranged in a separate block at the rear of the Bank Building.

The first and second floors are arranged as residential flats for the Bank staff, two on each floor, while a light area 42′ 0″ × 17′ 0″ runs up the centre of building, to give light to the Banking Hall and Flats. The light area stops at the ceiling level of Banking Hall and is covered in by a glass dome, thus giving ample light to the Banking Hall.

A public space 51′ 0″ × 22′ 0″ is directly opposite the main entrance, while a handsome counter in teakwood runs all round this space. There are six columns in the Banking Hall supporting the walls of upper floors; these columns are treated in the Ionic order with teakwood bases, a portion of the shafts being fluted in teakwood. Pilasters, also in the Ionic order, are arranged on the walls on each side of the Banking Hall between each window. The whole of the ceiling is connected up by beams, with architraves, friezes and cornices, running over the columns and pilasters, thus forming a series of panels. The cornice has enriched modillion blocks, while the members of the cornice are also enriched. All the joinery work is handsomely carried out in teakwood throughout the building. The first and second floors are laid in teakwood parquet, while the ground floor is in teakwood blocks.



The Banque de l'Indo-Chine, Peking.

The ground floor level of the Bank is 4 feet above the pavement level, and marbie steps are used to reach the ground floor level.

The roof is flat, reached by the main staircase being continued up.

The foundations are composed of a concrete reinforced raft 2′ 6″ thick extending over the whole of the site of the building.

ELEVATIONS

The exterior of the building is designed in the Renaissance style of Architecture.

The Bund elevation and the sides of building for a distance of 23 feet are in Soochow granite; the remainder of the side elevations, also the back elevation are in artificial stone.

The ground floor storey is rusticated up to first floor line. The windows have quadrant shaped jambs and semicircular heads, surmounted by nicely carved keystones.

The main entrance is in the Doric order, with detached polished Tsingtau granite columns, the jambs being quadrant shaped, the columns being set in same. There is a massive entrance door in teakwood, with handsome wrought iron gates outside same. The architrave frieze, cornice and pediment are set in a semicircular arch, with carved shields on each side.

A heavy Platz band runs all round the first floor level. The ends of the Bund elevation are in rusticated granite, while the centre portion has two Tsingtau polished granite pilasters and two polished three quarter Tsingtau granite columns between the windows. The columns and pilasters extend two storeys to the main cornice. The Tsingtau granite columns and pilasters have carved caps in the Ionic order, while the main architrave frieze and modillion block cornice are in the same order.

The centre windows to first floor Bund elevation have detached columns, entablature and cornice in Doric order with small balustrade forming balcony, while the two end windows are in the Ironic order. All the first floor windows have circular pediments. The second floor centre windows are in the Doric order, while the two end windows have molded architraves.

The main architrave has the name of the Bank cut in same and gilded over.

There is a balustrade to the flat roof, while at each side there are copings with carved swags and shields.

The side elevations are in artificial stone, in exactly similar style to the Bund elevation described above.

Messrs. Atkinson & Dallas, Ltd. were the Architects for the building.

The New Building of the Banque de l'Indo Chine on the Bund in Shanghai.

THE TIA EUGENIA SUGAR FACTORY, P. I.

The following letter from Sr. Julio Infante, Manager of the Tia Eugenia Factory, Tigbauan, Iloilo, P. I , to Mr. C, Hedemann, Manager of the Honolulu Iron Works, is of interest:—You have requested my opinion in regard to the machinery which your company has sold to Mr. Jose Zulueta, of whose interests I am administrator on this District, and I esteem it a great pleasure to be able to give you the same in this letter.

"I have had the opportunity of inspecting, on various occasions, the different sugar-producing sections of this Island of Panay, and also those of the Island of Negros of the Philippine group; I have had the opportunity of visiting the antiquated as well as the modern sugar mills which exist in both these islands, with the exception of the Central of San Carlos; and I can sincerely affirm that nowhere have I found machinery so complete, so perfect, and which fulfills so satisfactorily its object, as that which you have sold us through the agency of the Pacific Commercial Company.

"The two boilers with which you have provided us are of adequate capacity to operate all the machines composing the factory; the principal engine which moves the crusher and mills is of ample power and capable of operating one mill more; the mills, which are hydraulically regulated, effect a magnificent extraction, and in combination with the boilers achieve the result, astonishing in a plant of this type, of obviating any expense for fuel, since the bagasse is more than sufficient to entirely feed the boilers.

"The arrangement of the clarification and evaporation apparatus, filter presses, vacuum pan, centrifugals and sugar storage department, is of such finished design as to be the admiration of all who have visited the factory, even of those who are at present proprietors of other modern factories, or agents of various sugar machinery houses of Europe.

"I find an unbounded satisfaction in being entrusted with the administration of a plantation which is equipped with a plant like this which you have furnished us.

"I sincerely believe that there can be no harm, that, on the contrary, a great benefit will be conferred on my country, my compatriots and friends, in recommending to the extent of my influence the acquisition of equipment of Honolulu Iron Works Company manufacture by all who may be in need of modern sugar machinery,

"We appreciate, and desire to thank you for, the courteous treatment which you, as well as the Pacific Commercial Company, have extended us, and, personally, I can assure you that I will, on every possible occasion, do all in my power to help you by demonstrating to my countrymen the superior advantages of the Tigbauan factory.

THE UNITED STATES STEEL CORPORATION

The announcement is made that the United States Steel Corporation and its subsidiary companies propose to have a comprehensive exhibit of its operations at the Panama-Pacific Exposition in San Francisco in the year 1915. It will begin with the ore fields and carry on an educative picture of its operations in ore mining, rail and water transportation, dock operations, coal, coke and pig iron production, steel manufacturing in its various lines and will also present in a materially displayed way the processes of manufacturing of many of its subsidiary companies' products; also how it utilizes its by-products and the display of many of the uses in which its general products are employed, typifying the advancement in the uses of this country's resources.

In addition to the material exhibits before mentioned, the Corporation intends to exhibit in a comprehensive manner, by moving pictures, its operations throughout all departments showing the ramifications of the processes of the Corporation's operations. It is proposed as well, to set forth to the world the work which the United States Steel Corporation has done toward the social welfare of its employees and those depending upon them. Also it will exhibit many forms of safety devices that have been conceived by the Corporation officials and its employees, and in the installation of which large sums have been, and are being, expended by the Corporation. In this social welfare department will also be shown the methods employed by the Corporation in the aid and care for the injured and the welfare of employees' conditions at work and the benefits that are aimed to be afforded to employees at their work and in their surroundings. Also the voice that is given to the employees through their committees in bringing about these improved working conditions and the general plans of the Corporation's methods.

FAR EASTERN RAILWAYS

CHINA

Kowloon-Canton Railway.—A Hongkong paper of May 19 reports:—The growth of traffic on the British section of the Kowloon-Canton Railway has necessitated the addition to the rolling stock of a new modern-type British-made locomotive, which arrived from Home last week. The new engine is intended for use on the main line, and is being erected at the Railway Works at Hunghom under the superintendence of the Loco. Superintendent, Mr. C. D. Lambert, it having arrived here in sections. Messrs. Kitson and Co., of Airedale Foundry, Leeds, are the makers of the locomotive, which is of the 2-6-4 side-tank type. It is fitted with leading radial truck, six driving wheels coupled, and a trailing four wheeled bogey. The length over all is 43 feet 10½ inches; and its weight in working order is 90.7 tons. The driving wheels are 5 feet 1½ inches diameter and the radial and bogey wheels 3 feet 7 inches. The cylinders are 19 inches in diameter by 26 inch stroke, and are fitted with Walschaert's valve gear. The heating surface is 1,810 square feet and the tractive force 20,603 lbs., at 75 per cent. of the boiler pressure. The locomotive carries 1,900 gallons of water and 3½ tons of coal. In the matter of gear, one or two experiments are to be tried with this locomotive. It is being fitted with Wakefield mechanical lubricators, which pump oil under pressure to all the bearings and cylinders in the engine, thus doing away with dozens of small oil-boxes. By this arrangement the supply of oil is self-regulated, according to the speed at which the engine is travelling. Another innovation will be the fitting to the front of the locomotive of one of the Pyle National Electric Headlights, of some 25,000 candle power. This light will illumine the track for half a mile ahead, and will be worked by a small turbine and dynamo coupled up to the engine, the light regulating itself. It is expected that this will be of the utmost use on the night trains in typhoon weather, as it will show up, far ahead, any obstructions which may happen to be on the line. The locomotive, which is expected to carry out her steam trials in about three weeks' time, cost about £4,700.

Shanghai-Nanking Railway—The following figures of traffic returns (approximately) for the week ended May 23 are issued by the Shanghai-Nanking Railway:—

Year.	Passengers.	Goods & Sundries.	Total for the week.
	$	$	$
1914....	48,854	11,828	60,682
1913....	45,195	9,615	54,810
Increase.	3,659	2,213	5,872
Decrease	—	—	—

For forty-seven weeks.

Year.	Passengers.	Goods & Sundries	Total
	$	$	$
1914 ...	2,276,235	482,580	2,758,815
1913....	2,043,987	443,876	2,487,863
Increase.	232,248	38,704	270,952
Decrease	—	—	—

Week ended May 30.

Year.	Passengers.	Goods & Sundries.	Total for the week.
	$	$	$
1914....	54,332	13,196	67,528
1913....	42,037	10,306	52,343
Increase.	12,295	2,890	15,185
Decrease	—	—	—

For forty-eight weeks.

Year.	Passengers.	Goods & Sundries.	Total.
	$	$	$
1914....	2,330,567	495,776	2,826,343
1913....	2,086,024	454,182	2,540,206
Increase	244,543	41,594	286,137
Decrease	—	—	—

Week ended June 6.

Year.	Passengers.	Goods & Sundries	Total for the week.
	$	$	$
1914	58,124	16,703	74,827
1913	45,387	10,577	55,964
Increase.	12,737	6,126	18,863
Decrease	—	—	—

For forty-nine weeks.

Year.	Passengers.	Goods & Sundries	Total
	$	$	$
1914....	2,388,691	512,479	2,901,170
1913....	2,131,411	464,459	2,596,170
Increase.	257,280	47,720	305,000
Decrease	—	—	—

Week ended June 13.

Year.	Passengers.	Goods & Sundries.	Total for the week.
	$	$	$
1914....	48,853	18,900	67,753
1913....	48,067	17,001	65,068
Increase.	786	1,290	2,685
Decrease	—	—	—

For fifty weeks.

Year.	Passengers.	Goods & Sundries.	Total.
	$	$	$
1914....	2,437,544	531,379	2,968,923
1913....	2,179,478	481,760	2,661,238
Increase.	258,066	49,619	307,685
Decrease	—	—	—

Week ended June 20.

Year.	Passengers.	Goods & Sundries	Total for the week.
	$	$	$
1914	42,770	11,107	53,877
1913	42,854	19,209	62,063
Increase.	—	—	—
Decrease	0,084	8,102	8,186

For fifty-one weeks.

Year.	Passengers.	Goods & Sundries	Total
	$	$	$
1914....	2,480,314	542,426	3,022,800
1913....	2,222,332	500,969	2,723,301
Increase.	257,982	41,517	299,499
Decrease	—	—	—

MANCHURIA

Penchihu-Niuhsintai Light Line.—The light line starting on the left bank of the Taitzu at the railway bridge near Penchihu, and running for a little over 9 miles to Niuhsintai, where a colliery is located, used to be operated three times both ways daily. As the sidings to Hungchienkou, Wangchiakou, and Hsiaonankou, each about 1½ miles long were completed, the times of running trains, have been increased to eight daily since June 1, making it possible to transport 300 tons of coal a day to Penchihu Railway Station. There are said to be about 80,000 tons of coal in stock at the collieries, and by the new arrangement these heaps of stock will be gradually carried away. A mixed train carrying passengers is being operated twice each way daily, the intermediate stations being Tsuichia, and Wolung. The fare is 7 sen each section, it costing 21 sen a trip between Penchihu and Niuhsintai. The fare on the three sidings is 5 sen for each. The freight rates are 6 sen per ton per mile at the carload rate, 8 sen in ordinary cases, and 6/10-8/10 sen per 100 *kin*.

New Station at Changchun.—The new South Manchuria Railway Station at Changchun was formally opened on June 4.

The main building has the floor area of 632 *tsubo*, and is designed on the Renaissance plan. It is a two-storeyed brick structure, steel-girdered and tile-and asphalt-floored. A flat brick annex stands between the main building and the passenger-car shed. It contains a lavatory, an office for railway guard, a store-room, etc.

Work was begun in March last year. It cost about Y. 200,000.

South Manchuria Railway Company.—The *Manchuria Daily News* understands that the Directorate of the S. M. R. Co. has fixed upon its policy *re* the Company's enterprises for the present fiscal year within the bounds of the Company's estimates which the Tokyo Government approved of with the concurrence of the Imperial Diet. It is gleaned that all fresh undertakings which are held as comparatively less urgent have been decided to be postponed to the succeeding years, although a positive policy will be adhered to in all business enterprises. Some substantial changes are said to have been made in the estimates, including the postponement of the reconstruction of the Dairen Railway Station.

The Y500,000 yen loan borrowed by the Chinese authorities at Mukden from the S. M. R. Co. last year fell due at the end of May, but the extension of the term by another year has been agreed upon.

The exact amount of the S. M. R. traffic earnings during the last fiscal year was Y22,275,132, being an increase by Y2,367,676 on the preceding fiscal year. The passenger receipts totalled Y5,069,127 and the freight receipts Y16,159,171.

JAPAN

Yokohama Station.—When the new Railway Station at Yokohama is completed in March next year, it will be an attractive feature in the bay city, says a Tokyo paper. The station is entirely a stone and brick structure, modelled in the Renaissance style, and is two stories high. The new station faces the town of Yokohama in front, with the Tokyo-Yokohama electric railway line of the Imperial Railway Board on its right, and with the main track of the Tokaido line in the rear. On the ground floor are ticket office, parcels office, and the offices of the station master and the office force. Passengers will get their tickets on the ground floor, and go upstairs, where the waiting rooms for the First, Second and Third Class, and for women, and a dining hall are provided. From these waiting rooms, passengers can descend, across bridges, direct to the train or to the electric railway track. Lavatories and dressing rooms are also provided upstairs, and in its equipment and general arrangements, the new building will surpass the present one.

SIAM

The Southern Railways.—On the first of June next the Southern line was, we learn, to open to traffic the section from Wong Phong to Pranburi, while the section from Nagor Sridammaraj to Tungsong will be opened to traffic on the 1st of September, says the *Siam Observer*. The Southern Line, it is stated, has in contemplation the erection of offices for itself near the station at Bangkok Noi.

Railway Contracts.—A consular report states that tenders were invited from the leading British, American, Belgian, and German structural engineering firms by the Royal State Railways of Siam for the delivery at Bangkok and Chumpone of 43 open lattice type girder bridges, required for the extension of the northern section of the Siamese State Railways to Chiengmai, a distance of 220 kilometres. Although Siam has hitherto ordered most of its locomotive and railway rolling stock equipment from Germany, this steel-work will be obtained from Great Britain. The designs submitted by an English firm were considered by the consulting engineers to the Siamese Government to be the most satisfactory of all submitted, and the contract for the whole of the work has therefore now been awarded to this firm.

GENERAL

Pervaya Ryechka-Cape Churkin Branch.—In order to afford greater convenience to shippers of freight and to shorten communication between the railway and the wharves at Vladivostok a branch line is to be constructed from the station Pervaya Ryechka, near Vladivostok, to Cape Churkin, for which purpose the Government has appropriated the sum of Rls. 3,500,000.

SHIPBUILDING

Hongkong and Whampoa Dock Co.—On May 29 the steamer *Senang*, built for the Senang Steamship Co., was successfully launched at the Hongkong and Whampoa Co.'s dock. The vessel will trade between Netherlands—India and China Coast ports.

The *Senang* is a handsomely modelled steel single-screw steamer, length 245 feet overall, beam 38 feet, depth moulded 16 feet 6 inches. Of the single deck type, with top-gallant forecastle and continuous poop and bridge, combined with long boat decks and navigating bridge, she presents quite a trim appearance. Though primarily intended as a general cargo and passenger steamer, provision has been made for large measurement freight, the holds being absolutely void of obstruction. This may be said to be a special feature of the structural design. In lieu of the customary hold pillars, continuous steel girders are worked under deck at the hatch sides, being supported by strong beams, which in turn transmit any stresses to the ship's structure in a gradual manner through deep arched web frames. For the rapid loading and discharging of cargo, four powerful winches and two steam cranes are installed on the bridge deck. Water ballast may be carried in either peak tank and in the cellular double-bottom, which extends throughout the vessel. Ample accommodation is provided for the passengers and crew, all fittings, including electric light and fans, being of the most up to date style. The life-saving appliances are 25 per cent. in excess of British Board of Trade requirements. The machinery, fitted amidships, consists of one set of triple expansion engines, having cylinders 18 inches, 29 inches and 48 inches diameter, stroke 36 inches, and two single-ended boilers 12 feet 9 inches diameter, 10 feet 6 inches long, supplying steam at 180 lbs. working pressure, natural draught. To ensure her being thoroughly efficient and seaworthy, the designer, Captain Kockx, has had the vessel classed 100 A1, under special survey, by Mr. J. Lambert, surveyor to Lloyd's Register; also built to Board of Trade rules and regulations. When laden to the disc., it is anticipated that the deadweight carrying capacity of the *Senang* will be 1,725 tons.

Shanghai Dock and Engineering Co., Ltd.—A steel sea-going tow-boat, the *Brodie Clarke*, built by the Shanghai Dock and Engineering Company, Ltd., for the Kochien Transportation and Tow Boat Co., Ltd., was successfully launched on May 27, the christening ceremony being performed by Miss Sutherland. The new vessel, which is constructed in accordance with Lloyd's requirements for their highest class for sea-going tow-boats, measures 147'0" in length, 26'6" in moulded breadth, and 16'6" in moulded depth. She is built with a forecastle forward and long bridge-deck amidships. On the bridge-deck a steel house is constructed for the accommodation of the captain, with a wheel house placed at the forward end. Underneath on the main-deck a saloon, with stateroom accommodation for the officers, is constructed, also the usual galley-stores and space for salvage gear. Accommodation for the crew, in keeping with this class of vessel, is fitted up in the after tween-deck.

The ship has electric lights and search light installed, and is fitted with steam steering-gear, steam windlass and capstan at the forward end, and steam capstan at the after end. The propelling machinery consists of one set of triple-expansion, surface-condensing engines, capable of developing 1,200 indicated horse power, with the usual pumps, feed-heater, and independent feed pumps, and general service and fire pumps. The steam is generated in two large cylindrical multitubular boilers, fitted with forced draught. The machinery is arranged so that the vessel can undertake harbor work with only one boiler in commission, giving 600 I. H. P., or two boilers if desired, giving the full 1200 I. H. P. The whole of the machinery, boilers, windlass, steering gear, etc., has been constructed in the Dock Co's. own workshops.

The Kawasaki Dockyard.—Mr. Y. Kawasaki, President of the Company, has made the following statement to a press representative:—The Kawasaki Shipbuilding Company is on the strongest possible basis financially and it is not conducting negotiations with any bank for a loan. In connection with the construction of the battleship No. 5, the Company received an order from the Government to make ready the necessary materials costing 1,350,000 yen. Even if the construction of this ship be suspended, the Company would not discharge its employees as the company would not be put into trouble through this suspension. At present 12,000 men are employed in the yard, and they are fully occupied for various kinds of works. The principal works now on hand are the building of the warship Haruna, of 27,500 tons, the N. Y. K. steamer Yasaka Maru, 12,000 tons, to be used on the European service, the Tokuyama Maru, 7,500 tons, and the Toyohashi Maru, 7,500 tons, to be used on the American line, the Osaka Shosen Kaisha steamer Harbin Maru, 5,500 tons, to be used on the Dairen service, another vessel of 9,500 tons for the American service, and another of 2,500 tons for the North China service. Besides the above, the Company is making 72 engines and several hundred passenger carriages to order from the Government Railway Board.

IRRIGATION, ETC.

Penchihu Water Supply.—The construction of waterworks at Penchihu on the Mukden-Antung Line, was started in 1912. The supply service was commenced in January last year. The only portion of the work to be finished is the installation of private connections for the subscribers. This work will be completed by next September. The service is open by means of public hydrants on the water-ticket system. The rate is ludicrously cheap, costing only ½sen per pair of oil cans. According to mining experts, as the mining operations are extended further down underground, the wells in that town which give good clear water will become gradually dry, and the necessity for a waterworks service is bound to assert itself. The construction of the service cost Y.200,000. It is capable of supplying a population of 40,000. The supply is derived from the Taitzu, and is raised to a tank 150 feet above the level of the surface of the River. The present population of the town is 2,200.

IRON AND STEEL

Tsingtao Iron Works.—A telegram from Berlin dated June 5 says:—The annual meeting of the Shantung Railway Company has passed a resolution authorizing an increase of the capital of the Company by Mks. 10,000,000, in order to erect iron and steel works at Tsangkow near Tsingtao.

MINING

The Fushun Colliery.—The management of the Fushun Collieries started on April 6 the excavation of an open cast at Kuchengtzu where the coal seam is accessible at only 24 ft. underground. The seam was reached on May 28th. It may be that this part of the seam was once beneath the river-bed of the Hun. The quality of the coal on the surface is found to be rather indifferent, but as it goes down deeper an improvement in quality is expected. At the outset, an area of about 5,000 *tsubo* is to be cleared of the earth, etc., over the coal seam. The clearings are estimated to be about 20,000 cubic *tsubo*, and a gang of about 1,000 coolies are now kept at work for the removal of the earth, etc. At the present rate of progress, the seam will be exposed for excavation over the whole area allotted for the purpose by the end of August. Steam shovels will be brought into play shortly to commence mining operations. The mining area will be extended gradually westward. This novel mining method has been resorted to with the object of meeting a shortage in supply which will be experienced as a sequel to the execution of the sand-flushing plan in the existing shafts and pits.

Kailan Mining Administration.—The total output of the Administration's mines for the week ended May 16, amounted to 64,850.64 tons and the sales during the same period to 58,420.20 tons.

Week ended May 23, output 62,735.05 tons, sales 72,080.47 tons.

Week ended May 30, output 59,143.63 tons, sales 43,131.10 tons.

Week ended June 6, output 59,572.90 tons. sales 66,070.55 tons.

Week ended June 13, output 63,177.31 tons, sales 46,419.30 tons.

TRAMWAYS

Shanghai Tramways.—The returns of the Shanghai Tramways (Foreign Settlement) for the week ended May 27, are as under:—

	1914. $	1913 $
Effective receipts (after deducting loss by depreciation of subsidiary coinage)	19,258.36	14,878.78
Passengers carried. . .	1,061,829	761,466
Car miles run	63,786	51,884

The loss by depreciation of subsidiary coinage for the week was $6,127.91 equal to 25.50 per cent. of the gross cash collected on the cars as compared with $4,207.62, equal to 23.44 per cent. for the corresponding week last year.

For the month of May 1914, and for five months ended May 31, 1914, with figures for the corresponding periods last year:—

	May, 1914. $	May, 1913 $
Effective receipts	86,710.50	75,821.18
Passengers carried	4,737,250	3,848,956
Car miles run	281,466	235,727
Loss by depreciation of subsidiary coinage. ..	27,436.80	21,715.61
Percentage of loss by depreciation of subsidiary coinage.	25.34	23.49

	five months ended May 31, 1914 $	five months ended May 31, 1913. $
Effective receipts ..	..406,422.10	346,276.09
Passengers carried ..	..21,582,944	17,270,360
Car miles run	1,311,207	1,099,619
Loss by depreciation of subsidiary coinage	..120,655.60	94,462.98
Percentage of loss by depreciation of subsidiary coinage	24.19	22.76

Week ended June 3.

	1914. $	1913. $
Effective receipts (after deducting loss by depreciation of subsidiary coinage)	21,547.24	15,897.79
Passengers carried. . .	1,224,824	817,282
Car miles run	66,076	54,385

The loss by depreciation of subsidiary coinage for the week was $7,014.90 equal to 25.81 per cent. of the gross cash collected on the cars as compared with $4,542.14 equal to 23.54 per cent. for the corresponding week last year.

Week ended June 10.

	1914. $	1913. $
Effective receipts (after deducting loss by depreciation of subsidiary coinage)	19,941.91	19,598.53
Passengers carried. . .	1,171,407	1,027,802
Car miles run	67,520	57,455

The loss by depreciation of subsidiary coinage for the week was $6,398.81 equal to 25.82 per cent. of the gross cash collected on the cars as compared with $5,631.31 equal to 23.44 per cent. for the corresponding week last year.

Week ended June 17.

	1914. $	1913. $
Effective receipts (after deducting loss by depreciation of subsidiary coinage)	17,954.64	19,064.99
Passenger carried. . . .	1,052,201	1,018,885
Car miles run	66,715	64,423

The loss by depreciation of subsidiary coinage for the week was $5,781.11 equal to 26.08 per cent. of the gross cash collected on the cars as compared with $5,411.76 equal to 23.28 per cent. for the corresponding week last year.

Week ended June 24.

	1914. $	1913. $
Effective receipts (after deducting loss by depreciation of subsidiary coinage)	18,873.43	17,412.67
Passengers carried . . .	1,110.314	924,051
Car miles run	67,046	60,995

The loss by depreciation of subsidiary coinage for the week was $6,071.34 equal to 26.02 per cent. of the gross cash collected on the cars as compared with $4,914.61 equal to 23.22 per cent. for the corresponding week last year.

COMPANIES

Amagasaki Cotton Spinning Co. (Japan).—The profit and loss account is as follows:—

	Yen
Net profit for the term	785,256.49
Brought over from last account ..	758,614.12
Total	1,543,870.62
To be distributed:	
Loss reserve	50,000.00
Secondary reserve	50,000.00
Bonuses for directors and auditors.	78,500.00
Dividend at 20 per cent. per annum	284,000.00
Special dividend at 10 per cent. per annum	142,000.00
Carried forward to next account ..	939,370.62

Sino-Japanese Cotton Spinning Co.—The profit and loss account is as follows:—

	Yen.
Net profit for the term..	62,226
Brought over from last account ..	91,412
Total	153,638
To be distributed:—	
Legal reserve	3,200
Secondary reserve	6,500
Bonuses	5,000
Dividend	88,000
Carried forward to next account ..	50,938

Peak Tramways Co., Ltd.—The report of the directors and statement of accounts for the year ending April 30, 1914, was as follows:—

The net profit for the twelve months, after deducting directors' fees and general managers' remuneration and providing for loss on subsidiary coins, amounts to	$36,891.79
To which has to be added the balance brought forward from last account	1,350.31
Making available for appropriation..	$38,242.10

The directors recommend that a dividend at the rate of 8 per cent. per annum be paid to shareholders, absorbing $24,000; that $10,000 be transferred to reserve fund; that $2,000 be written off stations and shelters; and that the balance of $2,242.10 be carried to a new profit and loss account.

Oriental Development Co.—This company's statement of accounts for the term just closed is as follows:—

	Yen.
Net profit for the term	804,498
Brought over from last account ...	586,902
Total...	1,391,400
To be distributed:—	
Loss reserve	96,600
Dividend equalization fund	32,200
Bonuses and social expenses	40,000
Dividend at 7 per cent per annum ...	690,000
Carried forward to next account ...	532,600

Japan Tannery Co.—This company's statement of account for the term closed on March 31 was as follows:—

	Yen.
Net profit for the term	174,922.19
Carried over from last account ...	67,585.51
Total	242,507.70
To be distributed:—	
Legal reserve	10,000.00
Sinking fund for fixed capital ...	15,000.00
Secondary reserve	15,000.00
Bonuses for auditors and directors, and social expenses...	12,500.00
Dividend at 10 per cent. per annum	125,000.00
Carried forward to next account ...	65,007.70

Hongkong Electric Co., Ltd.—The directors recommended the following distribution of profit for the past term:—

A dividend of $1.80 per share... ...	$108,000,00
Place to reserve	70,000.00
Write off plant account for depreciation	121,562.90
Write off property account for depreciation	25,000.00
Write off furniture account for depreciation	530.53
Pay a bonus to staff	6,283.38
Carry forward to next account ...	31,668.18
	$363,044.97

Canton Insurance Office Ltd.—The statement of the affairs of the Office made up to 31st December, 1913 is as follows:—

1912 Account.—After paying an interim dividend of $18 per share on May 22, 1913, the amount standing to the credit of this account is $503,980.66.

This, it is resolved to deal with in the following manner:—

To pay a final dividend of $3 per share ... ...$	30,000.00
To add to Investment and Exchange Fluctuation Account	40,000.00
To add to Reserve Fund	100,000.00
To add to Reinsurance Fund	190,000.00
To add to Underwriting Suspense Account to close the Account for year 1912	143,980.66
	$503,980.66

1913 Account.—The amount standing at credit of this Account is $1,514,267.78. Out of this the General Agents and Consulting Committee have declared an interim dividend of $18 per share absorbing $180,000. The balance of $1,334,267.78 will be carried forward.

Indo-China S. N. Co., Ltd.—The Annual General Meeting of the Indo-China S. N. Co., Ltd., was held in London on June 12. Balance of underwriting account was £83,459; £5,000 has been written off Debenture expenses and after providing for all expenses, usual depreciation and dividend paid February, the available balance was £43,008.15. The Board of Directors recommended payment of balance of 3 per cent. dividend on Preference Shares for the year 1913 and 5 per cent. dividend on Ordinary Shares. To be transferred to credit of underwriting account £8,173.—and carry forward £15,000.

S. Moutrie & Co., Ltd., (Shanghai).—The report of the directors for the year ended March 31, 1914 states that the net profits, including the amount brought forward from last year's working, amount to $76,098.13, which sum the directors recommended be divided as follows:—

	$
To pay a dividend of 10 per cent.	30,840.00
Commission to managing director, acting manager, and Bonus to foreign staff	7,385.00
To place to reserve	25,000.00
To carry forward to new account	12,873.13
	$76,098.13

A. S. Watson & Co., Ltd., (Hongkong).—The report for the year ended December 31, 1913 was as follows:—The net

profits of the Company for the twelve months under review, after paying all charges, including the salary of the General Managers, and providing for all bad and doubtful debts, allowing for loss on subsidiary coins, the payment of auditors' fees $500, and including $975.90 unclaimed dividends forfeited, amount to...		$100,920.59
To which has to be added the balance brought forward from the previous year.....		240.11
		$101,160.70
From this there has to be deducted:—		
General Managers' Commission of 5 per cent. on the net profits for the year.....	$5.046,02	
Remuneration of the Consulting Committee	2,000.00	
		7,046.02
Leaving availabie for appropriation		$94,114,68
We propose to pay a dividend of 7 per cent., which will absorb.....	$63,000.00	
Write off Building Improvements, Furniture, Fittings, Utensils of Trade.....	11,000.00	
Write off Aerated Water and other Plant and Machinery	13,000.00	
Write off Steam Launch, Steam Lighter, Water Boats and Motor Lorry	6,000.00	
	$30,000.00	
And carry forward to 1914 account.....	1,114.68	
	$94,114.68	

PERSONAL

Mr. Rigby, District Engineer of the Peking-Mukden Railway at Fengtai, has been promoted to be assistant Engineer-in-chief *vice* Mr. Cox, now Engineer-in-chief of the Canton-Hankow line. Mr. Farrant, district Engineer at Yinkow, has been transferred to Fengtai.

The Commissioner of Customs at Canton, Mr. Maze, and the Commissioner of Kowloon Customs, Mr. Lowder have been given the Third Class Chia-ho Decorations. The former Acting Commissioner of Samshui Customs, Herr von Rautenfield, has received the Fourth Class Chia-ho Decoration. The Deputy Commissioners of Canton Customs, Mr. Guernier, has received the Fifth Class Chia-ho Decoration, and the Assistants of the Canton Customs, Messrs. Sharples and Schregardus, the Sixth Class Chia-ho Decorations.

Mr. Hoare, the successor to Sir Somerville Head as third secretary at the British Legation, at Peking has taken up his duties.

Mr. A. H. Collinson, lately Engineer-in chief of the Canton-Hankow Railway, has gone to the north of Japan, to examine into timber production with special reference to the prospects of railway sleepers. Upon the completion of his investigations in the Hokkaido, Mr. Collinson is going to London to join a prominent firm of consulting engineers, who have interests in China.

Mr. W. Brattzow, Russian Vice-Consul at Shanghai, has been promoted to the rank of Consul and transferred to Kirin. His successor will be Mr. A Voznecienski, for some tim e Vice-Consul at Hankow.

Mr. William Henry Stone, Adviser to the Department of Communications in Tokyo, has been decorated by the Emperor of Japan with the First-class Order of Merit in appreciation of services rendered in developing the means of communication, and especially in the acquisition of the privilege of laying a cable between Japan and Shanghai.

Mr. Alfred Sze (Shih Shao-chi) has been appointed Chinese Minister to Great Britain.

Mr. C. R. Burkill has accepted an invitation to serve on the Electricity Committee of the Shanghai Municipal Council.

Dr. T. J. N. Gatrell has received an appointment as Foreign Secretary to the Chinese Salt Administration, carrying with it a salary of about $1,000 per month. Dr. Gatrell is at present absent on furlough.

Dr. Morrison, Political Adviser to President Yuan Shih-kai, left Peking on leave of absence on June 10. He will visit England and Canada. Before leaving the President bestowed upon him the First Class Chiaho decoration.

Mr. Frank Grove, M.I.C.E., Engineer-in-Chief of the Chinese section of the Canton-Kowloon Railway, has been appointed Engineer-in-Chief of the projected Nanking-Changsha Line. He will be succeeded at Canton by Mr. Foord, former Engineer in Chief of the Shanghai-Hangchow Railway.

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